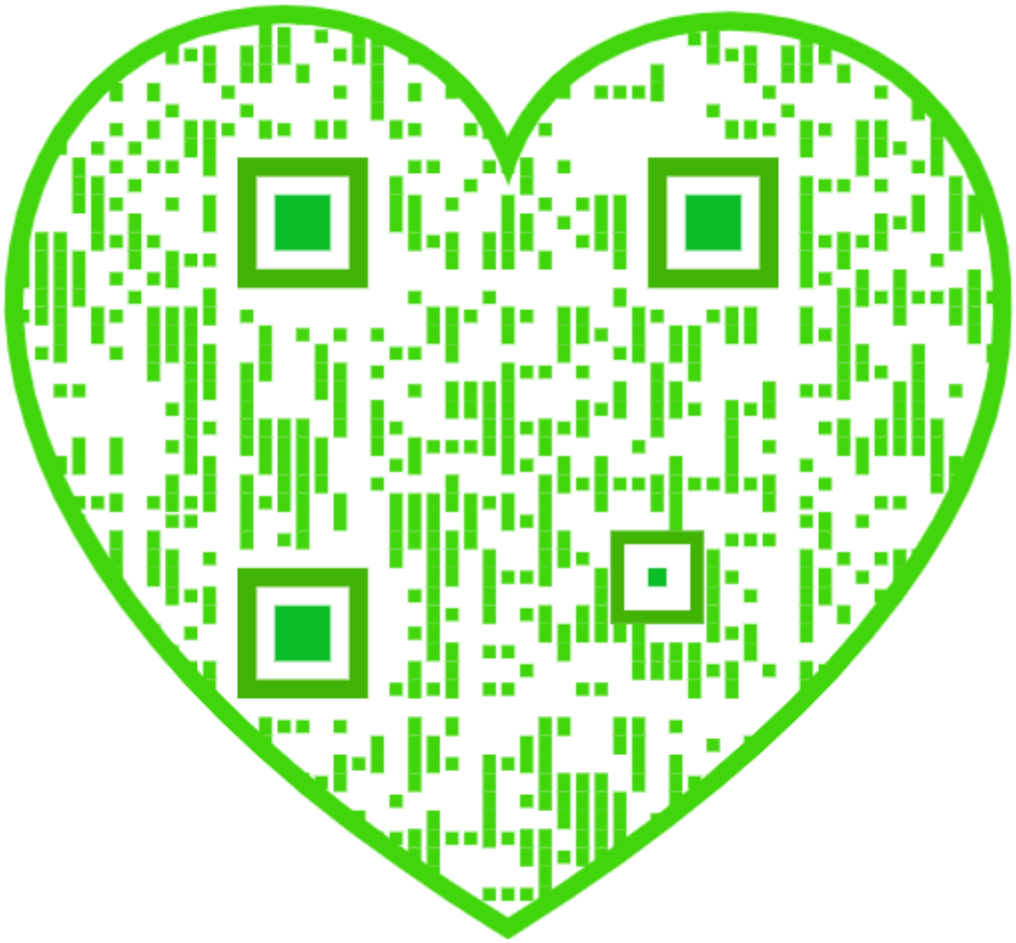

THE

NEW YORK

COACH-MAKER'S MAGAZINE,

DEVOTED TO THE

LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

EDITED BY E. M. STRATTON.

VOLUME THREE,

JUNE, 1860, TO MAY, 1861.

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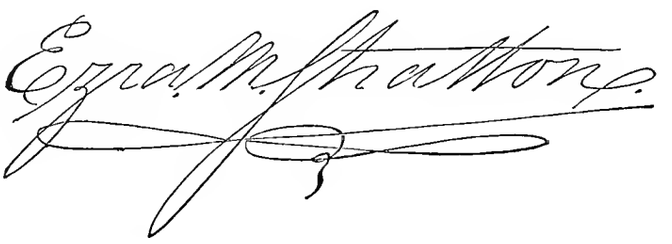
PREFACE.

The annual return of another May month, brings us to the close of the Third Volume of The New York Coach-maker's Magazine. Under the nautical figure of a voyage, a year ago, we set out to conduct the Editorial labor of this volume, under encouraging circumstances. That it has been successful in a literary point of view, a cursory examination of the contents will not fail to establish. Indeed, with such writers as Messrs. S. E. Todd, Jas. Scott, H. S. Williams, F. J. Flowers, A. Duxbury, R. Lurkins, F. W. Bacon, E. Edwards, Mrs. L. H. Sigourney, Misses Lua Delinn, Annie M. Beach, and a number of others we are not permitted to name, how could it be otherwise? That it has not been more pecuniarily profitable to the publisher, is chargeable to the distracted state of the nation; but, upon the whole, has been very satisfactory. We had obtained in the first six months of this year very nearly the number of subscribers we had to the second volume, and of advertising patronage, much more; for all which encouragement we are under lasting obligations to our generous friends of the Craft. We shall struggle to deserve as much in the future.

Without swelling promises by detail, we may state, that, as well as we have succeeded in meeting the wishes of our friends the past year, we intend to try and do better still in the coming one. No efforts which industry and experience can supply will be withheld in making this—as has already been acknowledged—the best speciality in Magazine publishing to be found, for its price, in this or any other country. We have much of the matter already prepared, and a great many designs in hand, expressly adapted to our pages; and the promise we have from our old and tried correspondents, foreshadows a successful result to our labors. It only remains for us to invite the continued coöperation of our many warm and generous friends to this work, in giving it their best efforts for a wide circulation, and in making it and its claims known to all within their circle of influence; while we continue

Yours, devotedly,



New York, *April 4th*, 1861.

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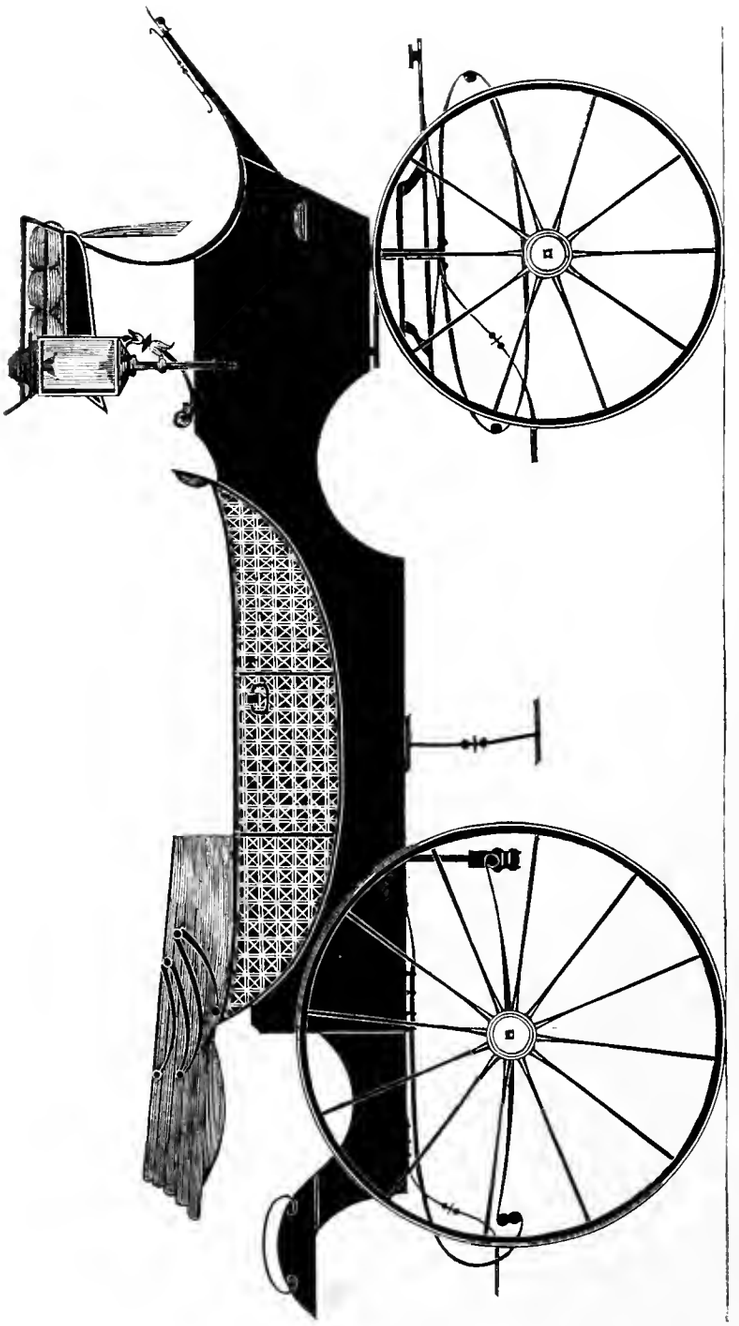

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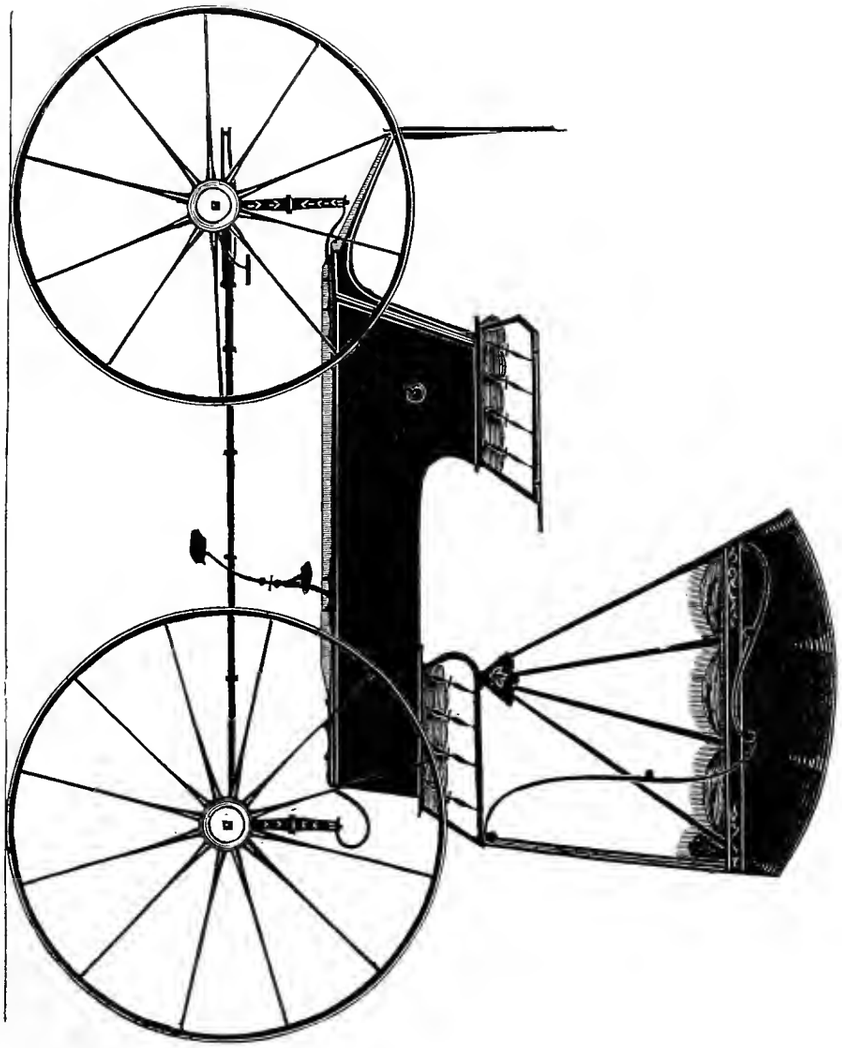

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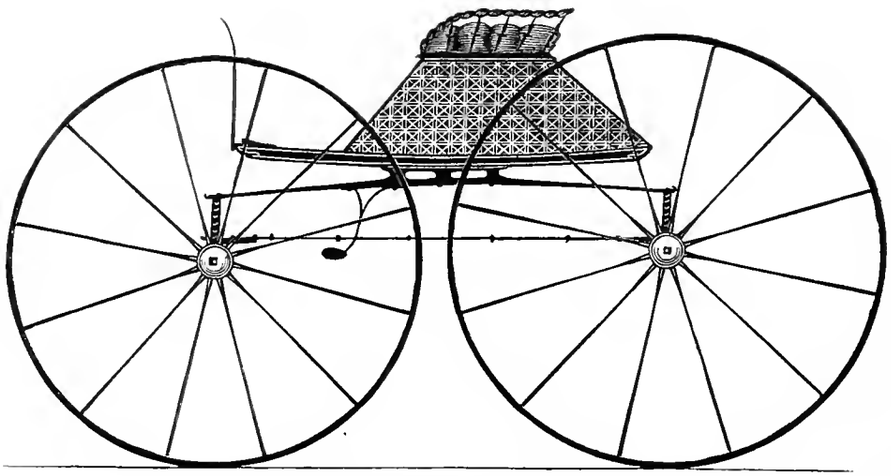

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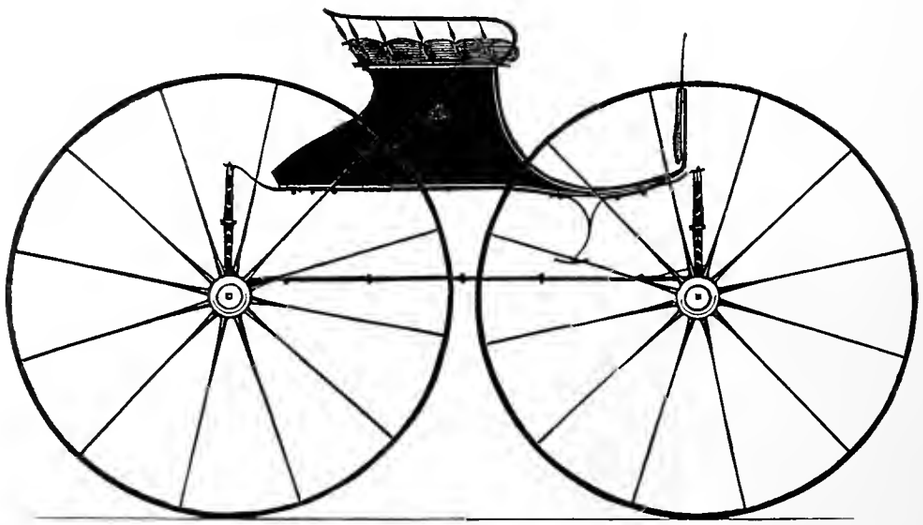

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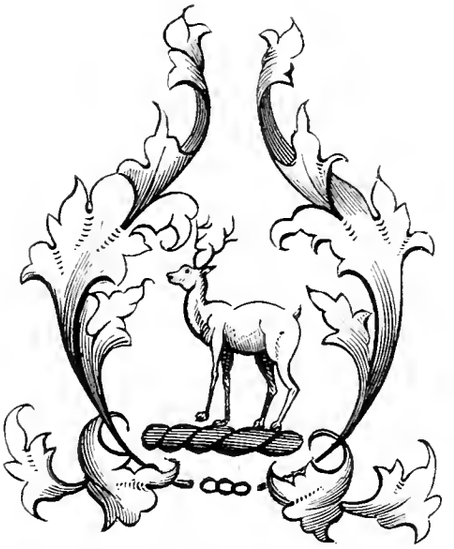

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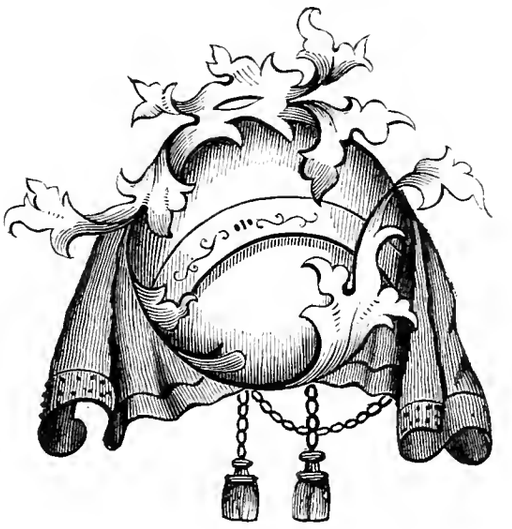

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Engraved expressly for the New York Coach-maker's Magazine.

Explained on page 12.

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

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Miscellaneous Literature.

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

REVISED BY JAMES SCOTT.

A TALK WITH THE READER.

Prefatory and introductory remarks are, generally speaking, decidedly bores to the reader, however necessary they may seem to the author; and it is, therefore, a source of infinite gratification to the compiler of these papers, to be able to shirk so unpleasant and thankless a task. The following letter will sufficiently explain all the whys and wherefores that ought to be made public; but, if any of the patrons of this Magazine, desire farther information we will cheerfully give it at the merely nominal charge of ten cents per line,—proceeds to be invested for the benefit of a very dear friend of ours, whose fortunes are just now in rather a dilapidated state of fix. Now for the letter!

Cottonboro, Ala., April 7th, 1860.

Sir:—I am a subscriber to "The New York Coach-makers' Magazine," a publication that I, as a member of the craft whose organ it is, regard with pride, and read with pleasure; but, sir, that pleasure has been curtailed, and you are the author of the curtailment. What do you mean, sir, by inflicting upon us such stories as your "Saber-Cut?" You must stop it, or we will *cut* you! We don't want such stuff, the papers of the land are full of it—running over with it; we have been dosed with it until it has become nauseating, and yet, *you* have the hardihood to offer us more. I see how it is: you have run out of material. Coach-makers are not funny enough, or foolish enough, or romantic enough, for you; their hum-drum lives, you think, do not afford a good field for story-tellers? Let me tell you, sir, that you are mistaken! They see as many ups and downs in the scale of fortune, and meet with as many stirring adventures, as any other class of Christian, law-abiding, and bread-earning men on earth; and if you, sir, do not possess the tact to draw their experiences from them, you might as well turn your attention to the "blood and thunder" style of fictitious literature, *a la* Cobb, jr., and leave the columns of *our* Magazine to other pens. If all this sounds harsh to you, or has a tendency to discourage you, or you should set me down as an impertinent meddler, I am sorry for it. My sole object is to give you a piece of wholesome advice, which I trust you will swallow and digest. To show you that I am sincere in this, I send you a diary kept by me during the years 1856 and 57; and I want you to *use it*. It contains sufficient raw material for the manufacture of a dozen stories, and allow me to add, just such stories as the readers of our Magazine want; so no more "Saber-Cuts," if you please.

Yours, &c., Paul Bradly."

Now, we will leave it to any burner of "the midnight oil" that ever drove goose-quill, if that is not the coolest documents on record—the veriest icicle of impudence ever concocted? Mr. Paul Bradly, you're a brick, and our hat is at your disposal! Our first impulse was to throw this peppery missive into the stove,—our second, to read it over again,—our third, to look into the diary and see what it contained. Having accomplished this, our ire flickered a moment and went out, for we found a mine of rich ore cropping through a mass of rubbish. [How do you like the word *rubbish*, Mr. Bradly?] So we dug out the metal, and thus lay it before our readers.

CHAPTER I.

There was a time, years ago, when Cincinnati was a perfect paradise for journeymen Coach-makers, when it was, in fact, the Mecca of those of the craft who turned their footsteps westward; but that time has gone by. The continued influx of workmen from the Eastern States, nearly all of whom arrived with empty pockets, and must have work at any price, has reduced wages to the starvation point, and the knowing ones give the place the cold shoulder. I had been so fortunate, as to obtain employment in that city at tolerable prices, and had made up my mind to stay through the winter,—it was then the early part of October,—when my employer informed me one morning, that he had made the highly important discovery that he was paying me too much for my labor. Times were hard, he said, and I must come down,—he could get the same work done for two-thirds of my price, and he must look to his own interest, and so forth. I felt inclined to assail the gentleman with sundry uncomplimentary appellations, and certain wrathful interjections, not found in polite literature, for my temper was always of the explosive order; but reason in that instance prevailed, and drove back the fiery impulse ere it found utterance. Without a word I packed my tools, went to the office for a settlement, and left the establishment. My nature not being one of the desponding sort, I did not set

myself down as the most unfortunate mortal alive, nor did I even declaim in the usual style against my luck. After the first burst of vexation, I rather liked the quandary in which I found myself, for I had a decided passion for "tramping," which I could now freely indulge without being mentally tormented by the oft-recurring axiom: "A stone that is rolling will gather no moss." I couldn't help rolling if I would, so the moss would have to wait awhile.

In the "Wants" column of the "Cincinnati Commercial," I had often seen advertisements offering situations to carriage-makers, so I procured a copy of that journal and fairly chuckled with delight as my eye fell upon the following: "To Coach-Makers:—A body-maker who is a first-class workman, can find steady employment and good wages, by applying to John Hub, Spokeville, Alabama." The very thing I wanted,—a situation in the "Sunny South," hurra! I dropt the paper, seized my overcoat and rushed for the nearest hotel, found a map of Uncle Sam's dominions hanging in the reading-room, ascertained that Spokeville was in the northern part of Alabama; then vacated the house, and broke for the Steamboat landing like a grey-hound. The river was up, and boats were plenty,—running my eye hither and thither among the huge placards that told the destination of each, I saw one marked Tennessee River Packet, for Tuscumbia, Florence and intermediate points. That was the one for me, so I went on board and secured a passage to Tuscumbia, the nearest point on the river to my destination. I returned up town, paid my board-bill, sent my baggage and tool-chest to the boat by an express-wagon, and after bidding adieu to a few acquaintances followed it.

On approaching the desk of the clerk to get the key to my state-room, I found that official engaged with a young man who was inquiring the fare to various places on the Tennessee River, and judging from the look of concern his face wore, it was evident there was something amiss.

"So you can't carry me to Tuscumbia for less than fifteen dollars," he said anxiously.

"No," answered the clerk indifferently, "that is the usual charge, and we have no two prices."

"Well, I've only got ten dollars," said the other, "so you must take me as far as you can for that, and I'll walk the rest of the way. I must get there somehow."

There was a frank manly expression about the man's face that interested me, and the memory of a time when I myself was in a similar predicament prompted me irresistibly to assist him.

"If you have friends in Tuscumbia," I said, stepping forward, "and can return the amount when we reach there, I will lend you five dollars willingly."

He turned and eyed me curiously for a moment, then, shaking his head, he replied: "No, I havn't any friends there, but I expect to get employment in that neighborhood. I'm a carriage-maker, and"——

"Hold on," I cried, "if you are a carriage-maker I will see you through, for I am one myself. Here is a V, I know you will return it, or your face is a lie,—take it, sir, and welcome!"

"Stranger you're a trump," said the man, seizing my hand and shaking it vigorously. "I'll take it, and pay you back too, see if I don't! Here mister, here's your fifteen dollars, so just chalk me down for Tuscumbia,—I'm in luck this time."

My new acquaintance possessed a never-failing fund of cheerful good-humor, and I inwardly congratulated myself on having secured a companion who would do much towards killing the monotonous tedium of a long journey. In spite of his rough garb, he would have been called a handsome man by any woman in the land, and in his unpolished manner of speech, there was not lacking evidences of mental culture, and nobility of thought. I liked him from the first, and it was easy to see that the feeling was reciprocated.

We had sauntered along the hurricane-deck, to the forward part of the boat, and stood watching the busy preparations for departure, when a carriage drove up to the "gang-plank," and an elderly gentleman stepped out and turned to assist an old and a young lady in alighting. My companion uttered an exclamation of surprise, and upon looking in his face I saw that it was pale as death; the lips were compressed, and the eyes glared with something akin to hate, on the figure of the man who stood by the carriage door.

"What is the matter," I inquired, laying my hand on his arm, "do you know that person?"

"Yes," he answered hoarsely, "he is my own uncle—my father's brother,"

"Then he must have injured you fearfully at some time, or I sadly mistake the language of your eye,—is it not so?"

"You're right there, he has injured me! and others too,—mother and father. But maybe I didn't pay him off part of what we owe him, well I did! The balance will be settled on the day of judgment, and then, Heaven have mercy on him! So we are to be passengers on the same boat, he added musingly, well, no matter, he won't recognize, *me* for I was only a boy when we last met. I suppose the ladies are his wife and step-daughter,—we heard that he married a widow lady who had one child—a pretty girl too."

"Yes, she is pretty," I said, "and good too; a bad heart could not look out of such sweet blue eyes, nor could evil lurk in the corners of that dainty mouth. The mother also appears a true woman, in spite of that downcast look; care and sorrow may have bowed the head, and taught the eye to shrink from the passing glance of strangers. Your uncle, I see, is no beauty."

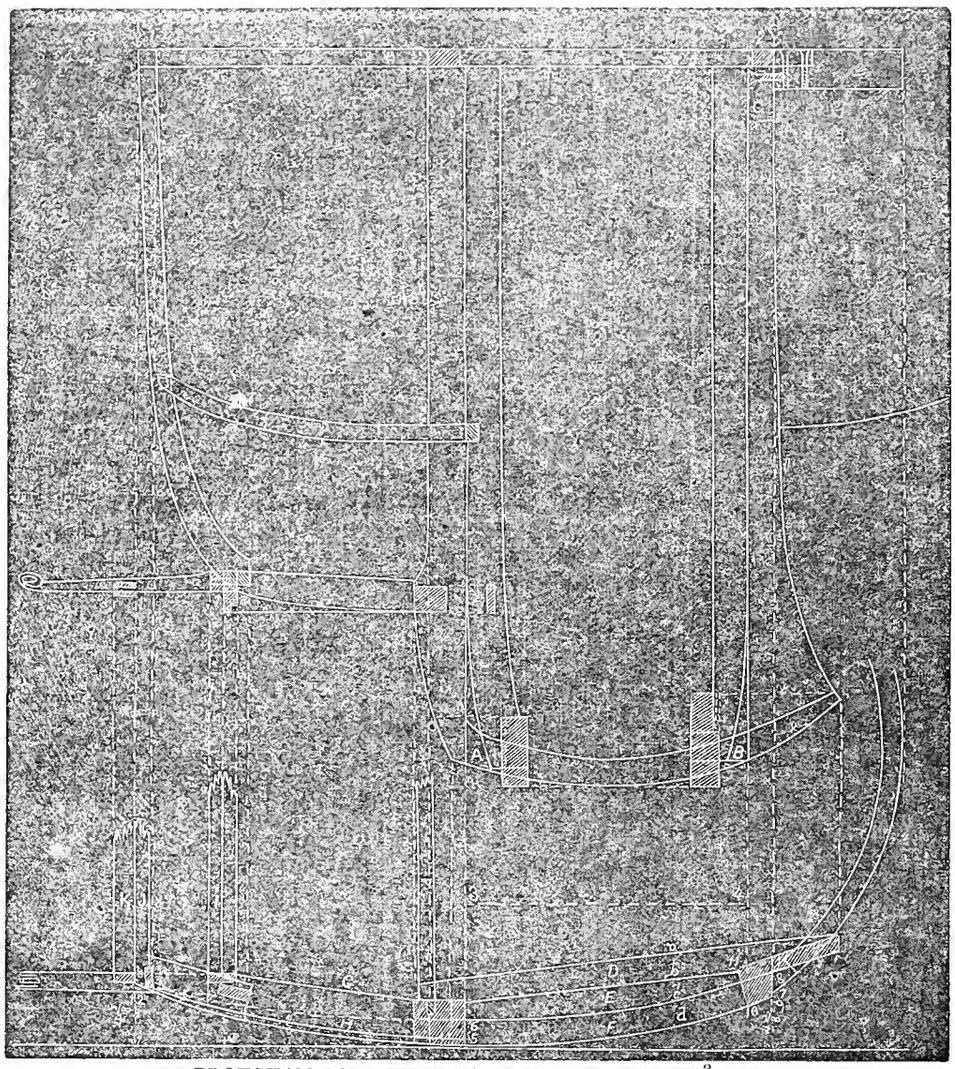
"No, and his countenance is a true index of his heart. Now that they are on the boat and out of sight, I will tell you something of his history, or at least, that part of it relating to me and mine. Let us walk to the other end of the deck; I see chairs there, and I can tell the story better sitting down."

We found seats, and he proceeded as follows:—

"My father and his brother, Henry and John Burnet,—Henry was my father's name, as it is also mine, John is the man we have just seen,—were joint owners of as fine a farm of five hundred acres as the State of New York can boast of. Nearly two-thirds of it was under cultivation, and far and near the live-stock raised by the Burnet brothers, was celebrated as among the very best in the State; breeders and drovers bought greedily, and at enormous prices, all the cattle they offered for sale, and wealth was pouring in upon them fast. But John was far from content, he wanted to get rich in a hurry, and three or four thousand dollars a year net profit seemed too slow to his grasping soul. His mind ran on speculations, and he often broached to my father a pet scheme for making, by one brilliant operation, as much money as they could reasonably hope to accumulate in a life-time of industry. By

unremitting argument, and the most insidious sophistry, he at length won the consent of my parent to the arrangement, which was this: they were to sell for ready money the farm, stock, implements, and all other property they possessed, when he, John, was to take the proceeds, sail for England, buy a drove of "blooded cattle," and ship them to this country; where they would command a ready market at large prices. The project looked plausible enough to my father, who was but too apt to defer, in matters of business, to what he thought the better judgment of John, so the sale was effected at a ruinous reduetion from the real value of the property. My uncle departed for New York to take passage for England; and our family (John was not married then) removed to a village near the farm, to await his return. He was to write when he reached his destination, but six long months elapsed without the arrival of a letter. My father wrote to various parts of England, and sent advertisements to prominent English Newspapers, but without avail; we could get no information of him whatever. We began to fear that he had either been lost at sea, or murdered and robbed before embarking, so my father went to the city to ascertain if possible, upon what ship he had taken passage, and at what hotel he had stopped. Procuring assistanee from those who were competent to the task, they examined the register of every public-house in town, consulted shipping lists, visited ship-owners, agents and "runners," in short, resorted to every possible means of obtaining some clue to his movements, but without success. Of two things they were certain: he had not, under his own name, stopped at any hotel in the city, or left the port on any ship or steamer, so my parent was forced to the dreadful conclusion that both brother and money, were lost to him forever. There was room for hope it is true, for nothing positive was known as to his fate, but spite of this, the blow fell with overwhelming force upon our family. A year passed and still no tidings of the missing man, another came and went with the same result, and my father's mind was fast giving way under the united effects of harrowing uncertainty, and the near approaeh of gaunt poverty. About the middle of the third year, the dreadful mystery was cleared up—made as plain as day, and that too, in a manner that restored to their full force all the faeulties of my father's nature. A neighbor of ours, who had been absent on a tour through the Southern States, for the benefit of his health, returned to the village where we lived, and immediately sought an interview with my parents. To our inexpressible surprise and indignation, he announced the startling faet, that he had seen John Burnet, alive and well, but passing under the name of Joseph Thompson. 'I did not, said the gentleman, make myself known to him, but rather avoided his eye, and gleaned from others all the information I could concerning him. I learned that he had first made his appearanee in South Carolina, some two years previous to the time I saw him. He had a drove of fine imported cattle with him, which he had shipped direct from England to Charleston. He found a ready market for the stock at high prices, sold them all, went back to England, and is now in North Carolina with another lot. Your course,' said he to my father, 'is quite plain: you must procure a requisition from our governor, on the executive of that State, and have him arrested, and brought here for trial; he will no doubt be glad enough to disgorge your share of the money and compromise the matter, but have him arrested first, and then you can dictate your own terms.' The hope of recovering his lost wealth, aroused my parent from the mental lethargy into which he had fallen, and in a week he was on his way south, armed with the necessary documents, accompanied by an officer, and also by two of our neighbors to testify as to the identity of the swindler. They found him easily, arrested him, and as he declared flatly that he had never seen my father before, and refused to return a cent of the money, they brought him back to our county town for trial. He waved preliminary examination, and entered into a heavy recognizance for his appearanee at eourt; all overtures of adjustment he treated with cool contempt, and left the village after retaining all the best legal talent it afforded to conduct his case before the eourt. Those who knew the many loop-holes in the law that money will open, predicted from the first that he would escape; and the result fully justified the prediction. When the day of trial arrived he again made his appearanee, and with him were two eminent lawyers from New York; the sight of whom filled my father's legal advisers with despair. It is needless to dwell on the hideous mockery they called a trial; forged papers, suborned witnesses, a *bought* jury, and the most consummate legal trickery carried it all one way: he was acquitted! But I had a score to settle with him of my own, and he didn't escape *me*. My mother had been called upon to give her testimony, and during the searching eross-examination she underwent, her veracity was not only impugned, but questions were proposed to her of the most shameful kind. This was more than I could bear, but I did not seek to vent my wrath on the vile tools that offered the indignities, they were only following their dirty calling; it was the *principal* I determined to punish. I was then a stout, rugged lad of fifteen, and my uncle was in the prime of manhood, yet I had no fear of failure. Confiding my intentions to some half-dozen young men of my acquaintance, I secured their services to prevent interference during the operation, and posting ourselves at the court-house door, awaited his appearanee. He soon came. Several of his counsel were with him, and they were laughingly diseussing the event just coneluded. As soon as he came within reaeh of my arm, I struck him full in the face with my clenched fist, and he fell; then mounting his prostrate body I pounded him savagely, yelling into his ears sueh choice terms as: thief! villain! perjured felon! and so forth. His friends tried to rescue him, but were so roughly handled that they beat a hasty retreat; and, cheered on by the cheers of scores of sympathizers, I punished John Burnet, Esq., to my heart's content. When completely tired out I let him rise, and with a countenance hammered to a jelly, and clothes torn to rags, he sneaked off; and seeing that popular feeling was against him, he left town without proseeuting me. My father died in a year afterwards,—the disastrous termination of the affair killed him. A small legacy left to my mother by a deceased relative, saved us from the fangs of poverty; and a hypocritical offer of assistanee from my villainous uncle, was rejected with scorn and contempt. We learned afterwards that he bought a plantation in one of the Southern States, and that, resuming his own name, he married a wealthy widow lady, as I told you before; but nothing farther. I hope he will not recognize me, but I will not avoid him; and it will not be good for him, if he dares to even speak to me.

(*To be Continued.*)



BROUGHAM BODY WITH CANT BOARD.—SCALE $\frac{3}{4}$ IN.

ENGLISH CARRIAGE ARCHITECTURE.

ACCORDING to the promise given in this Magazine for May, we shall now begin the publication of a series of articles on English Carriage Architecture, the diagrams for which will be reduced copies from the *Carriage-Builder's Art Journal.* This subject as applicable to the heavier American Carriages, has been pretty fully treated of in the two volumes of this work already before the public. What further is necessary, will be given as occasion may seem to require. The present series will give our readers the opportunity of comparing the English artisan's system with our own; and as it will include some diagrams of carriages, either not fashionable here, or else discarded—such as the Stanhope, Tilbury, etc.; fashionable here thirty years ago,—the novelty of them will prove interesting to our young readers, should they fail as lessons for the instruction of the practical coach-maker.

In the first place, draw the outline of the cant-rail on the board extending from 1 to 2 at the top of the diagram.

2. Get the width of the door, as shown between the figures 3 and 4.

3. Find the turn-under of the standing-pillar at A.

4. In the same way find the turn-under of the front-pillar, as seen in the drawing at B. The cant in both of these examples is about double that in American carriages.

5. Next strike a perfect sweep from the extreme point of the back-pillar at 12, touching the point at 6, and again at 8, and continue until it reaches the extreme front of the front-pillar.

6. Proceed and lay down the width of the front pillar C, as shown between 8 and 10 on the cant.

7. Strike a line with the compass from 10 to 11, taking the centre from the dot, as shown on the standing-pillar on the cant. This gives the bevel of the front-pillar.

8. Lay down the thickness of the door-bottom, as shown on cant D.

9. Get the thickness of the bottom side, also shown on the cant.

10. The size of the short bottom side, is shown between the lines A and H in the cant. It is understood that the seat may be varied to suit convenience. I marks the seat-rail; J the back-rail; K the cross-bar.

To make the subject still more plainly understood, we may observe that the line *a* in the cant represents the inside of the bottom-side; *b* outside of the bottom-side, or sill of the door; *c* outside of the front-pillar and door-bottom; *e* the outside of the cant-rail.

The cant in the English example will give more "swell-out" from the same thickness of plank than ours, which is an object with the transatlantic craftsmen. The Coupe on page 205, vol. I, and that at page 144, vol. II, although different, come the nearest to this Brougham of anything we have yet published, and may perhaps serve as profitable subjects of comparison therewith. In *our* examples we have spelled *cant* with a *k*, but in these shall follow the English practice, without going into the merits of the question, as to which is the most proper, since the dictionaries have not enlightened us on the subject.

For the New York Coach-maker's Magazine.

THE AUTOBIOGRAPHY OF CALEB SNUG, OF SNUGTOWN, CARRIAGE-MAKER.

(*Continued from page* 222, *Vol. II.*)

CHAPTER IX.

The "burst-up and sudden flight of Wagonseller—Springsteel's letter to the Sawgetup firm—Mr. Flatt's "time" movement—Caleb under speeial instructions with a body-maker—The freedom frolic—Motherly care provides Caleb with a set of tools to begin the world with—Losing a job from jealousy—Caleb in New-Haven."

WAGONSELLER, as was mentioned in the last chapter, having satisfied the claims of his creditor Springsteel, was permitted to pursue his way to Texas unmolested, which country at the time was a dependency of Mexico, and comparatively a *terra incognita,* affording a sec-

ure asylum for absconding rascals, from every part of the United States. A report of the repository-man's dereliction soon reached the quiet little village of Sawgetup, situated some forty-five miles from the city of New-York, on the line of the post-road between that city and Boston, with which cities there was daily communication. The mail brought a letter from "your obedient servant," the New-York Coach-smith whose chase after Mr. Wagonseller, to Philadelphia has been before narrated. Mr. Springsteel entertained a special *friendship* for the Sawgetup carriage-making firm, as they stood charged on his ledger for repairs and alterations on *new* carriages sold by Wagonseller, and broken in use soon after. Every vehicle being warranted at the time of sale, somebody must make the warrantee good. Springsteel always had the reputation of knowing how to charge, and his bills always run up very fast. But without further comment I will present the letter.

NEW-YORK, *November* 23d, 1827.

MESSRS FLATT AND TOWNER,

GENTLEMEN:—I find imposed upon me the unpleasant duty of informing you that Mr. C. Wagonseller, your customer in Canal street, in this city, has abused the confidence you placed in him, as well as that of others, by absconding with a large amount of money, believed to have been realized from forced sales, privately and at auction, of his extensive stock of carriages, instead of acting honestly and selling in the fair and proper way. This, undoubtedly, will be unpleasant news to you, and the matter, I confess, has caused me many disagreeable thoughts, feeling, as I do, that I can give you no hope of ever recovering one cent of your loss by him. The repository has passed into other hands, and will hereafter be occupied by Messrs Coachman and Sellers, for the same business. An early call for settling the little accounts standing between us, will greatly oblige,

Your Obedient Serv't., THOS. SPRINGSTEEL.

This second "transaction" on the part of Wagonseller came to the ears of the country firm with blighting effect, from the shock of which it required some months to recover. If Mrs. Flatt was *fulsome* on the occasion of Wagonseller's late visit to Sawgetup, she was *fiery* now that he had for the second time played the rascal. She was sure that she never would trust any man again, "especially them Yorkers, for they were all a pack of robbers. Their principal study is only to plan how they may successfully rob poor hard-laboring honest country people!" Such is the nature of mankind. They pronounce on the character of the masses, from the conduct of an individual, without proper reflection.

This second misfortune had the effect of still more strongly exhibiting in Mr. Flatt's character that ill nature for which he had always been proverbial. To atone in some measure for the late losses in New-York, Mr. Flatt *tried* to lengthen each day one hour during the winter. Although he did not command, yet he expressed himself opposed to having his employees wear watches in his workshops. His object was well understood. He feared the hands would know when nine o'clock in the evening would arrive and then his "boys" would quit work. This game had been practiced nearly an entire winter, when I determined to provide myself with a "ticker," at all hazards. The hazardous part, however, was greatly lessened by the fact that I was Towner's apprentice. Having supplied myself with the "turnip" I defiantly hung it up over my work-bench during working hours. This was too much for the old boss's nerves, so coming along by me one day while at work he, scratching his head, ventilated it by saying: "I would as lief have a streak of lightning in my shop as a watch." Nothing more was said at that time, but the *meaning* of this singular remark was plain to all who heard it. He knew that should his men know when nine o'clock came around he would be able no longer *to cheat* them out of an hour in each day! Such were the trials attending apprenticeships thirty years ago in this country, when manufacturers were accustomed from the 20th of September to the 20th of March following, to keep their men at work daily from the rising of the sun until nine in the evening, and as we have seen above, *longer if possible.*

At that early day in the history of American coach-making the apprentice at wood-work was expected to practice on every branch, which included making wheels, carriage-parts and bodies, besides hanging up work and something at painting. This may not be the best course for making finished workmen, but will be found for the interests of all who design to settle down as principals in country shops. As a finishing operation, the last ten months of my apprenticeship were employed on bodies under the special instructions of a New-York body-builder; and being exempted from every description of repairing and other "callings-off" tending to interrupt the workman, my closing apprenticeship was more pleasant than the initiatory period.

Having arrived at the age of twenty-one, the next thing was to have "a freedom frolic," which was expected by every one in the shop as a matter of course, unless the candidate jour, chose to ever afterward run the risk of being known as a "long-tailed rat." The demonstration being determined upon, the work-shop was properly cleaned up and the afternoon of one day in the pleasant month of May, found the *lovers* of good brandy, Jamaica rum, and crackers and cheese, in Sawgetup, in addition to my shop-mates, all assembled in the shop, and, as they called it, enjoying themselves. I had left full instructions with the village grocer to let them have anything a certain shopmate might order on my account; and, I am at this distance of time sorry to say that this liberty was abused, for several of the parties got gloriously drunk, including the junior boss, whose excesses exceeded all the rest. I had left early in the afternoon, but was subsequently informed that the scenes then enacted were disgraceful in the extreme; Mr. Flatt himself declaring that that should be the last "freedom frolic" that would ever be held in *his* shop. I believe he was as good as his word, for he never suffered anything of the kind afterwards that I could learn of.

During my apprenticeship, without any knowledge on my part, my mother had provided for the purchase of a set of tools when I should become of age, from the savings of my clothing-money, which altogether amounted to only thirty dollars per annum. With the money in my pocket I left Sawgetup on the day of my coming of age as previously hinted at, for New-York, where I had determined to lay out the money to the best advantage possible. While in New-York I took a stroll into Broad street where I had partially engaged a job; when who should I come across but Mr. Flatt himself; and, strange as it may appear, we soon "struck a bargain" in which I promised to return to Sawgetup and resume work by the piece. This arrangement left me to board where I pleased, and working by the piece, I was so far my own master that I managed to stay with the firm six months longer, when by my industry I had worked myself out of

a job entirely—at least I was told there was nothing more for me to do.

Very soon after this, in the fall of the year, I had a call to an inland village where carriage-making had not yet been practiced beyond making common wagons. The village of Greenfield was more thickly populated with marriageable "calico" in proportion to the male population than I ever knew before or since—they stood as thirty to two. Curtis Jenkins, my new boss, was a young man who had done pretty much as he pleased among the girls, pushing them into the brook, when opportunity offered, or practicing upon them any other mischievous pranks, as suited his fancy. I had only worked in this place some twenty days, when a simple circumstance quickly deprived me of a job. A singing-school had been appointed in the village school-house for the evening, and of course, the boss and I were on hand. Among the young ladies was one, as fair as any of the daughters of America,—and this is saying much,—whom my new employer essayed to accompany home. This she refused to permit, since there was another Richmond in the field. Seeing how matters were taking a turn, I stepped up, asked permission, and was permitted to see her safe home —to the gate. But the next morning—what a storm! Jenkins had never before been refused, and Caleb was a rival who must be got rid of at all hazards, so he handed him his walking-papers. This ended my first job in a strange shop. The next movement was to tramp for a job. I brought up in one of the finest cities of the land —the beautiful "city of Elms," where I found some of the noblest specimens of the craft to be found in the world. I do not know how others may feel, but I shall always feel a respect for New-Haven coach-makers; because there I spent a portion of my earliest time as a journeyman, among her noble citizens. This place still maintains its reputation as being the largest manufacturing city in America, and besides supplying its home custom, furnishes the larger proportion of carriages for the southern market. Those who were in the business at the period referred to, have, many of them, retired wealthy, and many of them have gone to their final account, but they have left behind them worthy successors.

For the New York Coach-maker's Magazine.

IMPROPER CONSTRUCTION OF WHEEL CARRIAGES.

BY S. EDWARDS TODD, ESQ.

ONE of the most important considerations, in the construction of wheel carriages, is, *ease of draught*. Indeed, with the great majority of purchasers, this consideration stands highest. Everyone who uses a wheel carriage, whether it be a wheelbarrow, or an omnibus, or a "one-hoss shay," or a *jigamaree* on three wheels, (such as filled the minds of the Buckeyes about Columbus, not long since, with astonishment and wonder,) desires to know, almost the first thing, whether it runs hard, or easily. If a wheel carriage is built with ever so much taste, in regard to its symmetrical appearance, and finished off with the most costly materials, should it run heavily, no one wants it; and should a carriage suit a purchaser in every respect but in the one alluded to, every sensible man would consider that a sufficient excuse for declining to purchase it, even at a figure far below its true value.

It would seem that after a carriage-maker has been engaged in the construction of wheel vehicles during half a lifetime, he would be able to construct every part as nearly perfect as is ever practicable. In multitudes of instances, every part of a carriage *does* approximate to perfection so nearly, in its construction, that no man can point out a single defect, in any part of it. On the contrary, there are scores of wheeled vehicles manufactured, year after year, by some thought to be very good mechanics, who make a sad failure in one very important part, of every carriage they construct. I refer to

THE SETTING OF THE AXLE-ARMS.

Notwithstanding all that has been said and written on this subject, there seems to be a great lack of correct understanding of the *principle* which ought to guide a carriage-maker, in performing this part of his job, according to the principles of sound philosophy. Thousands of carriage-makers can assign a plausible and philosophical reason for constructing different parts of a wheeled vehicle according to a given principle, or plan; but, ask them, for example, why they make an axle-arm *tapering*, or what is the advantage in making them tapering, or why they set the ends forward or downward, and they will seldom give a correct and philosophical answer, that would be *intelligible* to a novice. Hundreds of carriage-makers have but one invariable rule for setting axle-arms, whether they are large or small—long or short. They have never seemed to comprehend the *principle* which guides a skillful carriage-maker when he sets one arm forward a little, and another one a little more, while he leaves another entirely straight; and, therefore, they blunder along, like a blind man, without ever knowing, positively, whether they are *right* or wrong, in finishing a job.

For the benefit of some of our young carriage-makers —and some old ones *may*, possibly, get a new idea by reading it—we will examine this principle, and endeavor to show *why* an axle-arm should ever be set forward at all, and when they should be set forward, and when not. There is no branch of carriage-making, which is more easily regulated by a philosophical rule, founded on the most correct mechanical principles, than this.

If wheels were made straight—without any dish—the true and more correct mode of making an axle-arm would be, to have it entirely straight, like the journals of the Railroad car-wheels. But, since it is important to have *carriage*-wheels made a little *dishing*, it would not be as well to have the arm entirely *straight* as it would to have it *tapering*, to correspond with the amount of dish in the wheel. Why? Because the wheel would not then stand on a plumb spoke. The idea to be kept in mind, *always*, should be to have the *under side* of the two arms of an axletree on a straight line with each other, and to have the wheel stand in such a position, that a perpendicular line will cut the middle of the spoke on the under side of the arm. If a dishing wheel were fitted to an arm entirely straight—not tapering—a wheel would not then stand on a plumb spoke; and the consequence would be, the wheels would crowd a little more *against the shoulder* of the arm, than they ought to, and they would not sustain as heavy a load as they would if they stood on a plumb spoke. Whenever this is the case, there is a fault, either in the *wheels* or in the axle-arms; and sometimes there may be a fault in both. When a wheel is dishing but little, and the end of the arm is set *downwards* and *for-*

wards also, there is a double-and-twisted imperfection in the construction of such a carriage. When the ends of the axle-arms are set downwards, little or much, they should never be set forward; because the wheels will run against the shoulder, harder than they ought to, without it; providing the wheels stand on plumb spokes, or on spokes inclining in the correct position to keep the hub against the shoulder. If an arm is set downward, more or less, from a horizontal line, and the wheel does not stand on a plumb spoke, but inclined towards the *end* of the arm, or nut, one imperfection will tend to counteract the other.—But, a carriage built in such a manner, will not run as easily, nor be as strong, as it would if the under side of the arms were straight, and the wheels stood on plumb spokes. Now, when the under side of the arms are straight with each other—which is the most proper manner of constructing them—if they are tapering, there is a tendency, in proportion to the amount of taper, to run *against* the nut, or linch-pin. To *counteract* this tendency to run more against the nut than the shoulder, the ends of the axle-arms are sometimes set forward a little, and sometimes a great deal. Old carriage-makers were sometimes accustomed to make not only the *under* side straight, but the *forward* side of the arms straight with each other, whatever might be the taper, or length of the arms. But giving axle-arms such a form, or set, as that, is a veritable outrage on correct mechanical principles, as every skillful carriage-maker will acknowledge, without hesitancy.

Whenever an axle-arm is set forward, either little or much, the effect is, always, to make a carriage draw harder, in proportion to the distance which the arms are set forward. To render the subject more intelligible, suppose that adjustable arms are attached to the axles of a carriage, and the wheels are set *outwards*, or *inwards*, at an angle of forty degrees. The wheels will then revolve very little, if any at all, in such a position, and about as much force will be required to draw such a carriage, as would be necessary where the wheels were chained, so that they could not revolve. Now, in proportion as the adjustable arms are set *straight* with the center of the axle, in the same ratio will the draught of the carriage be diminished. The least amount of set in an axle-arm forward, tends to increase the draught, whether the vehicle is a gig, buggy, cart or omnibus. Intimately connected with this subject is

THE DISH OF WHEELS.

Every good carriage-maker knows, that when a wheel is made *very dishing*, it is not as strong as it would be, were it just dishing enough to secure the greatest amount of strength. Wheels may not be dishing enough, as well as too dishing. Both extremes indicate improper construction. A carriage-maker should first understand just how dishing the wheels should be; then he will have a correct starting-point for determining the proper taper for the axle-arms. Now then, if the wheels are made dishing just enough and no more, and the arms tapered to correspond with the amount of dish, experience, common-sense and philosophy agree most harmoniously, that a carriage will run more easily, when the arms are *not* set forward, than it will if they are, providing they are straight on the under side.

LAKE RIDGE, TOMPKINS CO., N. Y.

INDUSTRY is fortune's right hand; care her left.

ENGLISH MASTER COACH-BUILDERS' BENEVOLENT INSTITUTION.

ON Monday evening, January 23d, 1860, the Fourth Annual Meeting of this Institution was held at the Carriage Bazaar, Baker Street, Portman Square. The Right Hon. the Earl of Shelburne presided, and in the vicinity of the Chair we noticed a large number of the leading members of the trade.

After the usual preliminaries, Mr. J. Holland read the report, which stated that although the Institution was being increasingly supported, both by the London and Provincial firms, there were still many wealthy firms who had not yet given it the benefit of their assistance; and the Committee had, therefore, again to press the matter upon the attention of their country friends.

Although three pensioners were to be elected upon that occasion, there was but one vacancy to fill up; the remaining sixteen being still in the enjoyment of their pensions. The general prosperity of the empire had with this, as with other trades, caused less distress than usual, for while, during 1858, £109 had been paid for temporary assistance, during the past year only £74 10s. had been distributed. The amount paid in pensions was £315. A further sum of £200 had been invested; and the amount of stock now standing in the name of the Trustees was £3,500. The subscriptions had been £469 1s.; donations, £86 2s.; and there was every reason to hope for an augmentation; and it had, therefore, been recommended that three additional pensioners be added to the present number. As this would require an increase of funds, the Committee earnestly appeal for assistance, and hope to meet with a hearty response. The balance sheet, as read by Mr. G. A. Thrupp, the Treasurer, stated the total receipts, including the previous balance of £54 15s. 4d., were £706 12s. 6d., of which a balance of £53 16s. 1d. remained, in addition to the funded stock of £3,500.

The Right Hon. the Earl of Shelburne, in a very appropriate address, moved the adoption of the report, which was carried unanimously. Messrs. Holmes, C. N. Hooper, J. W. Peters, and L. J. Leslie, J. Corben and others, then addressed the meeting in support of resolutions comprising votes of thanks to the Committee for the past year, and re-electing them, and also thanks to the Noble Lord in the Chair.

Previous to the close of the meeting, it was announced that out of a list of seven candidates, Rebecca Legg, Mary Ann Russell, and Ann Brooks, had been elected as pensioners of the Institution.—*Carriage-Builder's Art Jour.*

CARRIAGE-MANUFACTORY DESTROYED.—We are pained to learn that the manufactory of our esteemed friend Mr. Ralph Smith, of New Haven, Conn., was burned the first week in March. The fire originated in an adjoining building, at 12 o'clock at night. It seems that an alarm was early given, but owing to the defective arrangements of the fire-department, the flames extended to the carriage-shop occupied by Mr. Smith, which was totally destroyed with nearly all the contents, consisting of finished carriages ready for shipping, a large quantity of unmade-up material, and tools. We are not informed as to Mr. Smith's loss, but presume it is considerable; but as he has youth and energy on his side, we trust he will soon surmount his misfortune. We admire that trait in the American character which bears up under losses.

The Home Circle.

For the New York Coach-maker's Magazine.

OUR DOG "CHARLIE."

YES! we do own a dog, and call him Charlie; not because we have any particular partiality for the name, although, we think it modest and unassuming, but because the friends who gave him to us, had used him to that appellation; and, having a sincere regard for their wishes, we continue to call him "Charlie."

Our dog is not a small dog, nor yet a large dog; thick nor thin; long nor short; heavy nor yet a light dog; but of that medium size which is more pleasing to us than either of the extremes. He is by no means a rough-skinned animal, as the Russian terrier and French poodle, nor yet as smooth-coated as the Italian greyhound; but leans more to the latter than the former. Experts designate him as of the "English Terrier" breed, although, Charlie's license-papers describe him as a "black and tan," whichever may be the more proper and correct description we know not; but we do know that the color upon Charlie's back, from the spot of tan over the eye to end of the tail, is of a beautiful jet black; his legs of a red-brown color; his face ditto with not too much nor too little color upon it; and with about six white hairs upon the breast-bone, which we are told is some little disparagement, yet notwithstanding this, Charlie is called as near "thorough bred," as it is thought prudent to have the canine species.

Charlie stands about twelve inches high, and weighs about as many pounds; too large for a lap-dog, and too small to be kept as a terror to hypocritical mendicants and illiterate hawkers; but it is not for any of these qualifications that Charlie is a favorite with all who know him. It is not for his beautifully marked skin, his splendid symmetry of form, or yet his swiftness of speed; but there is a knowingness, an affection, an instinct in his nature so remarkable that the greatest stranger, the most demonstrative mocker of God's creative powers cannot help but admire his canine sagacity; a sagacity and instinct which a great many of those created in the human form would do well to imitate, and profit by. Charlie has not escaped altogether the ills that afflict the canine tribe; and when but a few months old he went through all the tortures of the diseases peculiar to his race; since which Charlie has kept himself in remarkable good health, and no wonder, for he never indulges in those unnecessary excesses which bring a great, we may say the greatest, amount of misery and suffering upon the human race.

Our dog is not like a great many of the dog kind, a gormandizer, that eats until his hide will hold no more. He is not like a great many of the human kind, who drink until a disordered stomach, overburdened with noxious stimulants, refuses to partake that which is offered it by the hand, and which the cravings of a dissatisfied loathful habit has not sufficient power to resist. He has no lazy, dirty habits; is never out of humor, and has no fits of despondency, experiences no "blue Mondays," or unhappy Saturday nights; is always true to his friends and respectful to his enemies—so long as they keep themselves at a proper distance; never proves deceitful, and bears no malice towards his neighbors, never flatters friend nor foe; but to all appearance takes the world as it "wags," and minds his own business.

But these virtues fall away into insignificance in comparison to the affection, faithfulness, and gratitude which Charlie evinces for his master. When the time arrives for our departure to our daily avocations. Charlie never fails to look wistfully into our face for a friendly grip of the hand and good-by salute. As we leave our domicil scores of yards behind, and take one more look before it is lost to our sight, we never fail to see a dark speck at one corner of the window, which plainly tells us Charlie is mourning our departure, only to welcome our return. And such a welcome! it would do your heart good to see. There are others, who have the claim to our first salutation; but Charlie's attachment is so sincere, and he shows it so unmistakably, that we allow him to monopolize our first greetings.

As we return from our daily toil, and approach our residence, we recognize the same dark patch upon the window-pane which we left in the morning; and let the night be never so dark, so soon as Charlie can see our form, or hear our footsteps, so soon do we hear his welcome "bow-wow" salutation, followed by such a demonstrative reception as makes us fearful of *dogmatic* and hysterical convulsions, which nothing but a cordial greeting upon our part can effectively do away with. After allowing us a sufficient time for the evening meal, Charlie expects an evening walk which daily exercise he has always been accustomed to, and which appears to be the height of his ambition. It frequently happens that we meet boon companions in these our evening perambulations, who would fain have us violate the hours which prudence dictates to us, we should appropriate to rest; but it is a hard job to keep Charlie quiet, and prevent an occasional howl, or moaning for the old garment in which he is snugly enfolded, and laid in the old arm-chair—our favorite chair—for the night. Would to God all human kind were "tucked in," slept as sound, and were as well provided for, as he is! Charlie is, and always was, a great favorite with the ladies, who never fail to bestow their usual encomiums upon him. Lovely forms, and fair lips have pronounced him as being "very cunning," "how knowing," "ain't he affectionate?" and as they bestow their smiles upon Charlie, they never fail to bestow the same compliment to his master, which is remarkably pleasant to our feelings; for we own to a great weakness for "woman's smiles."

Charlie, being imbued with more then a common amount of quick penetration, his discernment so acute, and his instinct so natural, it makes him our especial favorite; but there is another tie which inseparably binds our affection to him, and makes him the more dear to us. Charlie has been caressed and fondled, petted and indulged by one who was near and dear, whose noble mind fully appreciated all that was noble in Charlie's character; all that was affectionate in his next to human instinct; all that was beautiful in his splendid form and harmonious proportions. His generous heart could feel for Charlie's dumb condition; his lovable disposition would extend to all canine kind, all the sympathy and protection due to the human kind. This dear one, whose heart was without guile, and whose lips were never known to breath willful falsehood, always spoke kindly of Charlie, declaring him to be a "cunning little fellow," and "a real nice dog;" and, for his sake, since he has been taken away, at the birth of manhood, and when about to realize fond expectations taken away, we hope to enjoy a happier and a better sphere of existence, and if it only be to follow his precepts we will provide for, cherish, and protect Charlie.

Reader! you may perhaps own a Charlie; if so, watch and endeavor to practice his virtues, imitate his faithfulness and sobriety, extend to him that human protection which it is not in his being to provide for himself. There is much to be learned from the actions of these noble dumb animals sent by an all-wise Providence to be man's companions, very often his personal protectors, and at all times guardians of his property; and whose natural sagaciousness and intelligence shed lustre and truthfulness upon the wonderful creative powers of the Omnipotent.

E.

Pen Illustrations of the Drafts.

FOUR-IN-HAND PHAETON.

Illustrated on Plate I.

We are under many obligations to the Messrs. Brewster & Baldwin, coachmakers, 786 Broadway, New York, for this very original draft of a phaeton. It has been designed for a carriage constructing for a wealthy and distinguished banker of this city, whose establishment, we are informed, embraces some twelve different types of vehicles. The vehicle in question is designed to have about it that consequential appearance which our British cotemporary designates as "quiet good taste," and which is more after the European style of carriage than we are accustomed to build in America, although it possesses some points decidedly in keeping with our models. It is designed for seating six persons and a driver, and will make a very convenient family carriage for the Central Park traveling. The body, of cane-work, projects four inches over the rocker. Perhaps a few improvements might be suggested; but upon the whole we are satisfied that this carriage is not only unique but original, and reflects much credit upon its designers.

SQUARE WAGON FOR TWO SEATS.

Illustrated on Plate II.

By way of variety, we this month present our readers with a draft of a two-seated square wagon, entirely different from anything we have before illustrated in this work. The side-panel is depressed, while the bottom-side and front pillar are raised, thus avoiding the monotony usually perceptible in this kind of vehicle. For a showy turnout on "the cheap plan," with a "darkey" seated in front watching the *nabob* "boss" driving, this makes an effective "consarn." We have seen "faded specimens of European gentility," looking—at least in their own imaginations—every inch a lord, driving through the mud-plastered and cobblestone-paved streets of New York, in these wagons, in a style calculated to astonish the natives. The expense of trimming in this kind of carriage being small, recommends it to economical persons.

TROTTING BUGGY.

Illustrated on Plate III.

This buggy, when finely got up, makes one of the neatest kind of pleasure-wagons ever constructed. The boot of this example is cane-work, and in connection with a varnished wood body, makes a tasty job. The seat-rail is represented as trimmed after a design given on page 172, volume I., which, dispensing with the use of stuffing, makes a very light finish.

ROAD WAGON.

Illustrated on Plate III.

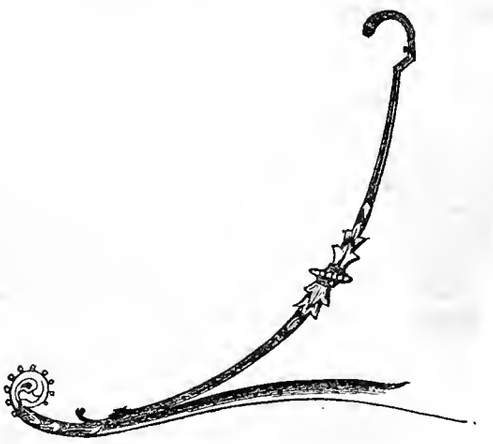
This is a modified form of the buggy given on Plate I., Vol. I., of this work, with a full side-panel. The front of the body is dropped a little, in order to give all the room possible for the legs consistent with a narrow panel. The body is novel in its general formation, and is much in favor with our Boston friends, to one of whom we are obliged for our sketch. The sweep of the seat-rail is somewhat antiquated, but is well adapted to this kind of body when lightness of appearance is studied.

We have now applied ourselves in earnest to designing, and have already in our hands a great variety of buggy drafts (some of which we think very fine) which we intend to give in the earlier numbers of our third volume. We are determined to satisfy the calls we have heretofore had for light vehicles, to the public's heart-content.

Sparks from the Anvil.

ORNAMENTAL PUMP-HANDLE STAY.

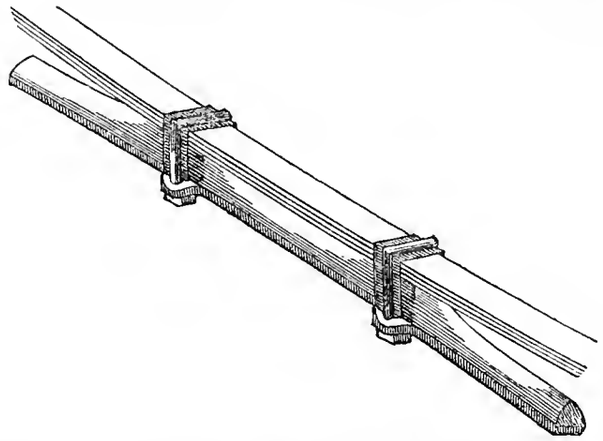
This fanciful-looking stay is designed to match with the Dickey-seat Stay, on page 210, Vol. II., of this work. It represents a piece of malleable iron, with a highly orna-



mental collar. This collar is bestudded with pearls to match the pump-handle scroll, also shown in our drawing. This is something in the latest style, and very novel.

AXLE-YOKE CLIP.

AMONG the improved modes of fastening the back-spring to the axles of such vehicles as are made with the double perch, we know of none better than the one here illustrated. The "nibs," answering the place of the old-fashioned yoke-coupling, are welded or otherwise formed solid with the axle-tree; and through these the clips pass,



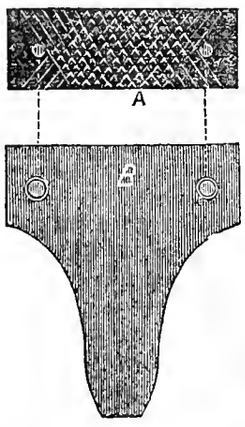
and are secured in their places by a nut on the under side. This mode of coupling avoids making bolt-holes through the bed and axle,—which has a tendency to weaken a point where strength is most needful,—and renders the job both effective and secure. We are happy to give this as an improvement untrammeled by a patent. This mode has long been in use in Europe, and, we have no doubt, will be hereafter generally adopted in this country.

For the New York Coach-maker's Magazine.

CLAMP TIRE-STOVER.

BLOOMSBURG, PA., March 27, 1860.

MR. EDITOR:—I send you the sketch of a clamp tire-stover that I have used in upsetting tire for two years, and have found to work perfectly, and which, if of any use to you, you may use as you think proper.



The sectional jaw, A, is secured to the part B, with two bolts. These bolts pass through the B half, and screw into the part A, thus forming the clamp. The inside faces of these two jaws are laid with steel, and cut with teeth in the manner of a file, as seen in the upper portion of the drawing, and hardened as hard as they can be made, and screwed fast to the tire before that is heated, and afterwards placed on the anvil, and stoved with the hammer. With this machine a bar $\frac{3}{16}$ of an inch can be stoved at one heat.

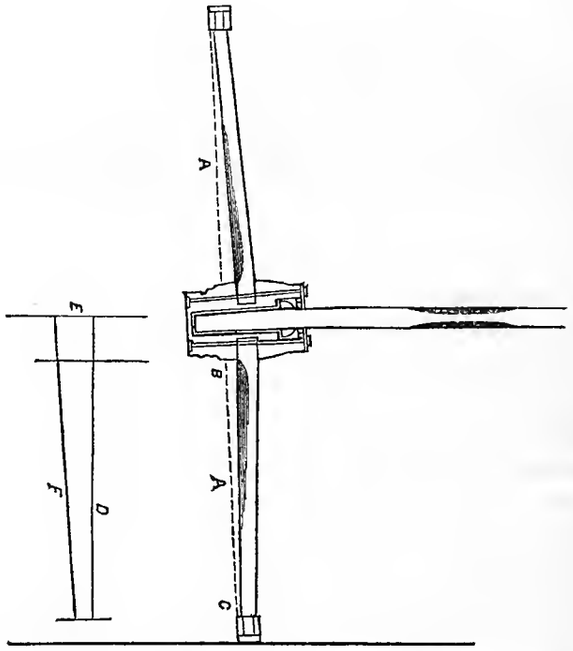
Your friend, ANDREW S. CROSSLEY.

[We think this instrument would prove very useful to the smith when he found his tire was too large for the wheel, and its use might save the necessity of cutting and welding again. In answer to further inquiries, our kind correspondent tells us, "In the first place clamp the tool fast to the tire, and then heat the tire a nice cherry red, and afterwards, having placed the tire on the anvil, strike a half a dozen strokes with a hand-hammer on the end of the tool, as fast as you can while the tire is hot, at the same time letting your helper hold on to his side, in the same way as when you are welding a tire." It will answer for tire either new or old.—ED.]

For the New York Coach-maker's Magazine.

TRACK OF CARRIAGES.—SETTING AXLES.

MR. EDITOR:—There has been a great deal said in your Magazine about the track of carriages:—why can-



not the track be got right? and so on. We all know it is a great nuisance to have such a variety of track, but as long as it is a rule to make carriages track for the locality in which they run, we must abide by it.

There is very little attention paid to the rule for setting axles among us. No matter how much or how little dish there is in a wheel, the back line of the under spoke should stand plumb. Well, how are we to get the set of the axle? Here is a simple plan: Lay a straight edge across the face of the wheel, at A A, and then measure the difference at the butt of the spoke at B, and the point of the spoke at C; then draw the perpendicular line D, with the line E at right angles; then mark off the difference you found at the butt, and point of the spoke, and draw the line F. The lines E and E show the true set of the axle for the wheel illustrated. The same rule is applicable to wheels of every dish. A BLACKSMITH.

IRON MANUFACTURE.

IN a paper on this subject, read before the Association of Foreman Engineers, in London, Mr. Robinson says: In 1619 Lord Dudley's invention of making iron with pit-coal made some progress, but mob law or fanaticism trampled the discovery under foot, and Sweden and Nor-

way were laid under tribute for the supply of England. In 1740, there were only 59 furnaces a-light in this country, and their total production of iron amounted to 17,000 tons only. Cort's magnificent and invaluable inventions were next spoken of, and the injustice with which he and his descendants were treated by the successive governments of Great Britain was commented upon with warm and well-merited censure. The well-known story of "Toby the Fiddler" and the "Swedish Stilling Mills," was also told; and this led on to the hot-blast improvements and economical arrangements of Mr. Neilson, of Glasgow.

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page* 212, *Vol. II.*)

We pass on to the August number of the first volume, and find directions for painting a buggy-body, by the same writer, continued. We have no objections to giving a body four coats of lead, as our friend directs, but at the same time we think three are sufficient; decidedly so, when you intend to follow with four coats of rough-stuff, and your job is nothing more than a small buggy, which, all will admit, does not require the same quantity of material that the large panels of a coach do.—We are afraid the rubber would find it pretty hard rubbing, prepared as directed, "one part boiled oil, one part varnish, and two parts japan, finishing with spirits of turpentine." The boiled oil might certainly be left out. I take it to be a mistaken notion that the harder your filling rubs, the more durable it will be. You cannot lay filling as you can fine-ground oil paint; therefore, allowance should be made for the heavy coat (comparatively speaking) you give it, and rather have it dry a little too quick than to give it a succeeding coat before the last is dry.

No mention is made of the last coat of rough-stuff being made a different color from the rest; but we take it for granted the writer agrees that such is very desirable, for the rubber then would be sure of knowing when he got "a sufficiently smooth panel for the next coat," and when six coats of paint have been applied after puttying, the "porosity of the putty" ought never to be mentioned. If the putty has only filled up the hole, and not been laid an inch all around it, a surface ought to be got before going down so low as the putty. I have heard of cases where the wood has swollen, and in other cases shrunk, and ejected the putty, and it is to meet one of these cases that I mention, "water should not be allowed to stand upon panels, either before or after rubbing, longer than necessary." It ought not to require going over a second time with block pumice-stone, to obtain a "level surface," that ought and is got by the first rubbing, if the last coat of rough-stuff is thoroughly rubbed off. When I do "face" a body, it is to give it a smooth surface, to repair defects in the first rubbing, and to fill up the little porous holes which all filling is liable to leave. We are not desired to grind this filling—it is optional—but works pleasanter and is altogether better.

I beg entirely to disagree with the directions for mixing the preparation coat of blue. No wonder work cracks, when mixed "one part oil and three parts japan;" and I should think it must require so much thinning before using, that but little body would remain, although it is not stated that turpentine should be used at all. Nothing darker than boiled oil should be used for best black. To mix it as directed—"one part oil and three parts japan"—would give it a brown tint, which it will acquire soon enough, and without assistance, and to "thin it with sugar of lead and raw linseed oil," is something unusual in carriage-painting, and the "reason"—to prevent the succeeding coats from striking in—decidedly uncalled-for, when it is intended to give three coats of color and varnish, one of fine American varnish and one final coat of English varnish. Section 12, "color and varnish" might be allowed under certain circumstances. Sections 13 and 14, "color and varnish," and "another coat of color and varnish," unnecessary; instead, give one coat of clear varnish, which makes section 15, "a coat of pure American varnish" uncalled-for, and section 17 ought to make a very good job of it—certainly for a small buggy, if you follow the writer's directions. He is conscious of having "given the painter instructions in the mode of painting a first-class job," and laid himself open to criticism from some; but, declining his kind invitation to discussion, we will merely add, that three coats of varnish with two good rubbings, ought to make a excellent job of a buggy—especially when rubbed twice with block pumice stone; but for a full-paneled coach it requires an extra coat, as the surface is more extensive, and little defects are more easily perceived. We quite agree with him that a cheaper mode may be adopted, and I think both to the advantage of the work and builder. If our friend had piece-work, could he put his work through the course he directs for the price manufacturers pay?

I beg to indorse all that Mr. James Scott says, in the same number, regarding a well-painted body and a good varnished one. If a man can combine all the qualities requisite in a good carriage-painter, so much the better for him: but as a general thing, men that can begin and carry a job through all its different stages to its completion, are very scarce, even in England, where every man is supposed to serve a certain term by indenture, which averages over six years to each apprentice. There are but few who are competent to begin and finish first-class work. It is generally the case that one man excels another in some particular branch, so that some men are good at varnishing, but can neither stripe or lay a good color; while others are good stripers but can not be called good varnishers. Some are excellent at laying colors, but have no taste for the other branches; and some men devote all their energies to obtaining a good surface, and think the other parts of the business are nought. In large establishments, where body and carriage painting are two distinct trades, the one knows no more about the other than body-makers know about painting—which is much less than what some of them imagine, when they say "it is an easy matter to learn to color properly, and that it requires but little practice compared with other parts of the trade." If a man has the taste, and gives his mind to it, it is easy; but if not, he can never be an expert at coloring.

With respect to the "streaking," I have never been troubled with it on bodies. I cannot see how it can happen, if the foundation is solid and dry, and has an even coat given to it. A short time ago, I had some trouble

with a carriage-part. I had given a coat of best black upon lead color, after which I had it rubbed with curled hair. The man gave it a regular scrub, which, in prominent parts, took off all the black, and of course when the lake was laid, it looked "streaky." It must be very good *boiled* oil, and very clear, if it be better than *raw* oil to mix it with. The sugar of lead is all that is required to insure its drying. Whichever you use—and raw oil being the palest must be the best—I generally prepare it one part each of turpentine and raw oil, and then grind it, and afterwards thin it with turpentine, which leaves that "subdued look" Mr. Scott describes.

I have expressed my opinion in another place respecting brushes and blenders, and will here only add, that if I had a good stock of well-broken-in Bristol brushes, I would prefer using them before camel-hair blenders.—Our friend acknowledges, and common-sense convinces any man, in or out of the business, that you can not spread a thick material with a soft-hair blender. What did they do before blenders were made?—for I take it that they are comparatively a new article. How do they get along in the "old country," where they are not known, in laying colors?—and it is generally supposed their colors, laid with brushes, will bear a favorable comparison with ours laid with blenders. Still, any one using either, and following Mr. Scott's directions, ought, if the lake is good, to make a satisfactory color.

In the September number, Mr. G. P. Tinker opens a question that might be lengthily discussed—the mixing of turpentine or oil to varnish. In the first place, well-manufactured varnish, composed of good materials and kept air-tight, never requires anything in it, and adding the one or the other to most varnishes would be liable to turn it bad. If anything *must* be used, I should certainly be of a contrary opinion from Mr. Tinker's. If your varnish is for under-coating, turpentine would be far better than oil. It would take less of it to make the varnish as desired, and instead of making it rub tough and sticky, would act just the reverse—helping it to form a more hard and solid foundation, which is always desirable, especially when finishing with English varnish; and should it be for the last coat, I am equally against mixing raw oil in it.

Our friend was never more mistaken than when he supposes that by adding a raw material to a manufactured article, the latter would be benefited by the addition. It is contrary to common-sense. Why not use raw oil instead of varnish? If it improves it by half manufacturing it (which is just the same, if you add the raw material), take and boil it. I consider that by adding one table-spoonful of raw oil to one pint of varnish, you will sacrifice its lustre and shorten its durability, beyond all question. You may not see it for a few days, but it will soon wear flat, with a subdued shine, which will at once convince you that you have destroyed its good qualities, if it ever had any. Men get in the habit of putting their varnish cups upon the stove until the varnish is past being warm, but becomes hot, making it work worse than it actually would do otherwise. If you allow your work to stand some time in a warm shop before varnishing it, so that the surface becomes of the same temperature as the shop, this will do more for your varnish (if it is not too thick) than thinning it, either with oil or turpentine, or heating it to a higher temperature than is the atmosphere of the shop you use it in.

The enthusiast whose only element is found in striping "flub-dubs" on carriage-parts, will do well to consider Mr. James Scott's hints on the "Uniformity of Design" that should be observed in striping. This is seldom considered by painters, although it is one of the principal features in striping. If a majority of our fast and fancy stripers were tested by this criterion, I am afraid most of them would be found wanting, for it is past my recollection when I last saw the striping upon a body and carriage correspond and harmonize in all its different parts one with the other. I confess to be faulty in this respect myself, but, always for good reasons. Sometimes it won't pay me; at others it would not remunerate the "boss;" and very often because it makes but little difference, as there are but few that understand whether done right or wrong, and by a great many would be considered "gaudy"—"too showy"—but if it were so it would be for want of taste in the painter. A great deal of striping may be painted upon carriages, and to the advantage of the vehicles if tastefully and regularly done; but it should be so done that any mechanic could follow you with compasses, and in testing it could not find it vary in any two parts of the carriage.

(*To be continued.*)

ORIGINAL ORNAMENTAL DESIGNS.

Illustrated on Plate IV.

WE are indebted to Mr. F. Heimbach, of Wilmington, Delaware, for these very fine designs. He will please accept our thanks for his kind attention. They show that he is gifted with a large share of originality in designing.

No. 1.—The scroll work of this design should be gilded, and shaded with asphaltum, and re-touched with the same. The ends of the leaves are to be touched up with white; and the border and outside of the figure are also to be gilded, and shaded with asphaltum. Paint the inside white, and shade with Vandyke brown. The net work may be striped with yellow, and dotted with light green.

No. 2.—The scroll work of this figure should be painted with burnt umber, and blended with lemon-yellow, tinged with burnt terra de sienna, and shaded with asphaltum in the dark shades. The leaves which turn over from the underside should be painted with blue and shaded with carmine. Those leaves which turn over at the top of the figure should be painted with dark green, blended with verdigris, touching up the ends with light green. In finishing, touch up the entire scroll with white. Paint the deer of the natural color; the roll on which he stands, red, white, and blue, shading with asphaltum.

No. 3.—The upper portion of the scroll work in this design should be painted with burnt umber and blended with white and shaded with asphaltum in the darker shades. The leaves turning up from the under side on the upper portion of the scroll should be painted a dark green, blended with verdigris. The leaves turning up on the lower portion may be blended with lemon-yellow,

tinged with burnt sienna; the remainder of the scroll being painted with burnt umber, blended with white, and shaded with asphaltum in the darker shades. Next, touch up the scroll with white. Paint the globe or sphere of a blue color, and do the blending with white. The belt should be painted with lemon-yellow, shaded with asphaltum. The outside of the mantle may be crimson-lake, blended with vermilion, and shaded with asphaltum in the darker shades. Paint the inside of the mantle white, shading with asphaltum and blue. The ground-work of the fringe should be painted with burnt umber and blended with white, shaded with asphaltum for the darker shades. The dotting may be done with white and burnt sienna; the cord and tassels being painted with a mixture of equal proportions of burnt sienna and white, dotted the same as the fringe.

For the instructions in painting these figures, we are under obligations to our friend Mr. T. R. Sherry, of Newark, N. J.

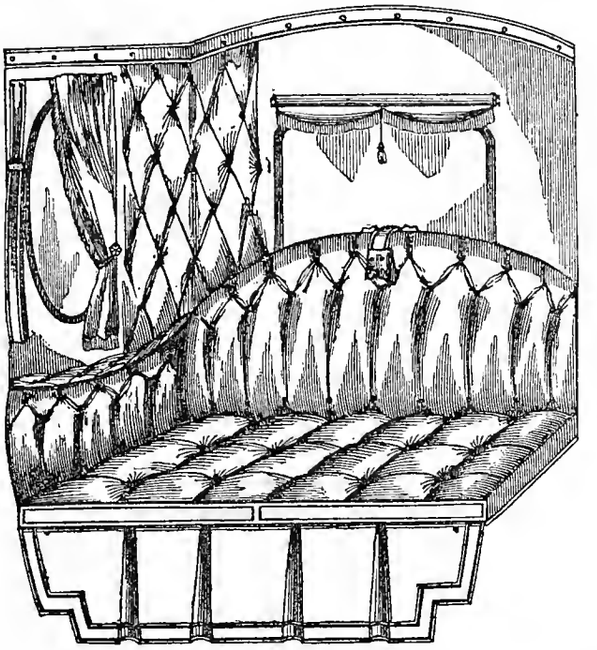
HARLAN & SON'S ENGLISH VARNISH.—Our readers will find our friends Driscoll & Co.'s advertisement in the advertising department of this Magazine. For these varnishes,—thought by many of the best American coach-makers superior to any other imported—this firm have been appointed the sole agents. We are pleased to hear that their sales have lately so increased that they have found it difficult to supply the demand. As, however, a large consignment is daily expected, this difficulty will be speedily overcome. Those who have found trouble with other English varnishes for the past two years, are advised to try Harlan & Co.'s.

PAINTER WANTED. — Messrs. Winter & Stafford, Schoharie C. H., New York, are in want of a competent painter, capable of putting on ornamental figures. To such, steady employment and liberal wages will be given. This is a fine opportunity for obtaining a good job, which we hope some of our readers will avail themselves of, by addressing them as above.

Trimming Room.

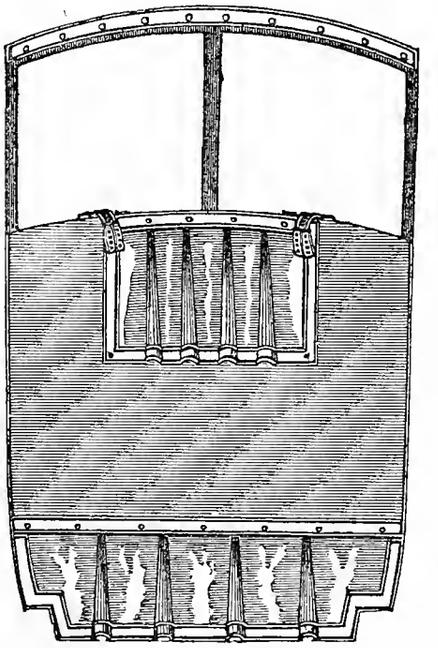
INSIDE TRIMMINGS FOR A ROCKAWAY.

THE annexed engravings represent different portions of the inside linings for a Rockaway, where the trimmings are designed for a first-class job. The peculiarity in this design is that no laces are used, but in place thereof a light cord underlaid and covered with the same material as that employed in the linings, is substituted. This is represented by the heavy lines in the drawings. All the buttons should be interwoven with green and brown silks (supposing the linings to be brown) which will produce a very tasty though plain appearance. The curtains for this job may be dark green silk, in keeping with the



brown linings. The remaining portions are so simple that a further description is rendered entirely unnecessary by the corectness of the drawing, which will enable any practical workman to understand it fully.

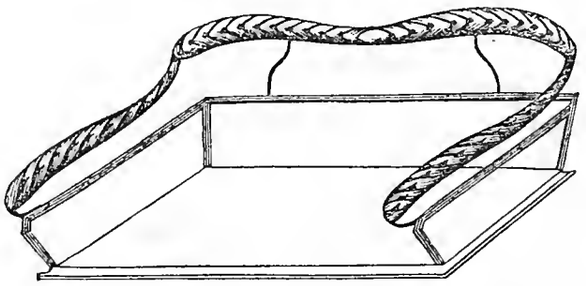
The next illustration is a front view of the lining for our Rockaway, in which the same feature in regard to the non-use of lace is observable. The falls made to correspond with the back, are intended more for ornament than use, yet are calculated to add a pleasing effect to the finish. The entire front quarter is designed to be covered plain with cloth and edged with cord, underlaid, in imitation of seaming lace. The entire design will constitute the linings for a Rockaway and other vehicles of a kindred form, unique, tasty, and neat.



SPIRAL TRIMMING OF SEAT ARMS.

THIS rest-back presents no new feature differing from the common "herring-bone" style of finish. The novelty distinguishable in this design is found in the *resters*.

Having made the rail and attached the wood forming the ground-work for the trimming, the arms are finished in



spirals as seen in the engraving, which may be done either with leather or cloth. The Basselain Lining-nail of the Ives & Pardee Manufacturing Company, at Mount Carmel, Conn., will furnish a good substitute for buttons and tufts in this and similar jobs.

FASHION IN TRIMMING BUGGIES.

THE New York style of stitching as we have previously intimated, is now entirely black; the plainer the more desirable. The struggle which has been going on for two years past between the black and white *heraldry*, although not quite as bloody as the wars in which Edward the Black Prince figured so conspicuously, in English history, yet if truthfully written would perhaps be quite as entertaining. Instead of gew-gaws, the public taste demands richness instead of tinsel, and neatness in place of show. Long may it continue so!

TO THE TRIMMING FRATERNITY.

IT cannot have escaped the notice of our readers that in this department of our work we have made during the past few months some improvement. Having made the proper arrangements, we feel persuaded that the present year, we shall be able to satisfy every reasonable expectation of our trimmer readers. There is, we are sure, no reason (except that of indifference) why this department is not as well stored with valuable matter as any other. To promote its usefulness, we hope our ingenious friends will not forget us. However crude their sketches may be, they will be corrected and made equally available with the most polished; and to such as will give us some thing of interest monthly, we shall take pleasure in presenting them with the Magazine.

SILVER CARRIAGE FOR THE SULTAN'S FAVORITE.—It is related in a letter from Constantinople, as one instance of the extravagance of the ladies in the Sultan's harem, that the favorite lately desired a silver carriage for out-door exercise. Its material required silver to the amount of $80,000, which was melted and transformed into the necessary ornaments, in which she soon appeared. Its cost was about 2,000,000 Turkish piastres,—a pretty expensive article for the old Mohamedan to shoulder.

The New York Coach-Maker's Magazine.

JUNE 1, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

RENEW YOUR SUBSCRIPTIONS.—*Our present subscribers will please bear in mind that our rule is to stop the Magazine when the year expires, unless they renew by sending us the payment* IN ADVANCE. *To secure a complete series, therefore, our friends will see the necessity of being prompt, for we intend to regulate our edition of the* THIRD VOLUME *as near the wants of the craft as is possible. Southern, Western, and Canadian money, or post-office stamps, will be received at par. Subscribers in the British Provinces must remit twenty-five cents extra, to prepay postage for the year.*

CAUTION.—*The great popularity of this Magazine, has led some unprincipled individuals to speculate in obtaining subscriptions without authority. The Publisher therefore gives notice that no receipt will be considered binding unless it has attached to it an engraved fac-simile of his autograph. In all cases, see that agents have a good supply of the Mag., and can produce a certificate of their honesty, entirely in the publisher's handwriting. Our friends will confer a favor if they will give us early notice of suspected impostors.*

SPECIAL NOTICE.—*After this (with the publication of the June Number), the price of the monthly parts of this Magazine will be raised to 30 cents each, to such as purchase only by the single number. Subscriptions paid in advance, as heretofore, will remain on the same terms. This is done because those who subscribe to us are our main reliance, and we are determined to favor those who favor us, and because it is not fair to sell equally as low to monthly purchasers as to yearly subscribers paying in advance.*

AGENCY—TO COACH-MAKERS.—*The publisher of this Magazine offers his services to fill orders for any article his friends may want, to be found in the New-York Market,* FREE OF CHARGE *where the individual is a subscriber. None but orders inclosing the cash are invited. Letters of inquiry, &c.,* MUST *contain two red stamps.*

AN AGENT'S LICENSE REVOKED.—*A person calling himself J. C. Brain, was some time ago introduced to us, and given an Agency on the Magazine; it was revoked on the 1st of March, and he is no longer an Agent, having broken his contract.*

☞ *Mr.* JOHN HEWLETT, *of Toronto, is the only agent we have in Canada West.*

☞ *All letters directed to this office on business,* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Name-plates furnished to order, of different patterns, for from $14 to $20 per hundred, at this office, or sent according to directions, by express, payable on delivery; to which, express charge must be added.*

"G. P. T., of Ind."—The drawings of your young friend have been received; but having enough of this description of design already in hand for the next nine months, yours cannot be made available at present.

"F. S. S., of N. Y."—We shall be very much pleased to receive a drawing of your platform spring buggy for the Magazine. Much obliged to you for your complimentary letter.

"C. C., of N. J."—We have never promised a chart as a part of our monthly publication; only as a sort of reward for clubs; and not even such was promised for the second volume.

"H. S., of Vt."—We will bind your volumes in muslin for 75 cents each.

"R. T., of Me."—We do not *give away* the numbers of this publication. Any number is worth at least 25 cents to you.

"J. F., of Pa."—We have one Singer's machine for stitching leather which we will sell at a low figure.

"V. B., of Mo."—Much obliged for your kindness in getting us up a club in your shop; will strive to still further deserve your good wishes.

THE EDITOR TO THE READER.

GENTLE READER:—For the period of two years we have been accustomed to meet monthly, and during that time such intimacy has sprung up between us, that we may without further introduction enter into the discussion of some questions which may be to the mutual advantage of both parties. We take it for granted that you are a *genuine* friend to our Magazine; that is, you are a regular paying subscriber, and consequently such in contradistinction to those *other friends*, who only borrow and read that which belongs to another. We sometimes think that we have too many of these "borrowing" admirers; but then we are in hope that some of them will feel that they have practiced that game already too long, and intend to reform in this particular, and subscribe themselves this year; so we shall defer our lecture to them for the present, and dismiss that subject by merely asking them: How long do you suppose a Coach-maker's Magazine could live on *your* patronage?

But you are a regular, or at least have been, an occasional contributor to our pages, perhaps. Should such have been the case, we feel ourselves under very many obligations to you personally for previous kindly rendered favors, and trust that our treatment of you has been such that you are fully satisfied, and that you will still remember us when leisure shall offer an opportunity for adding to the general stock of knowledge, intended for the craft. Please remember that the good offices you may do in this way will be beneficial in improving a business whose architectural claims are second to no mechanical art. Let us show to the world that we are lovers of literature as well as intelligent coach-makers.

But there are some, who say they cannot write for the press (yes, but too often such underrate their talents), but, that they are willing to furnish "the material aid." Very well! we shall certainly put you down among *our* friends, and having done all required for your *own* copy, we would respectfully urge you to present the claims of this Magazine (providing you are willing to allow that it has any claims) to the generous attention of your employees, or shopmates as the case may be, and ask them if they are not disposed to try us for the coming year. In this way you would secure our best wishes, and promote the interests of an enterprise calculated to benefit both you and us. In a word we trust you are of the mind of a subscriber who recently wrote us: "I wish to do everything *now* that is in my power to support the Magazine, for I feel proud of it as a member of the carriage business; for I believe it to be a true exponent of its best interests. I have now faith in it as a substantial investment, and faith in its editor as a man capable of carrying on such an enterprise successfully, and to the complete satisfaction of all." Very well said, friend Bartlett, and we are happy to add your name to our list of *real* friends, and shall exert ourself to deserve your friendship for the future.

During the past two years, in consequence of the stringency of the money-market among all classes of the community, some have not felt themselves able to give us their subscriptions. This excuse we are confident cannot be made available any longer, for business everywhere is in an improved and healthy state. For ourselves we have never looked upon it as a plausible reason for not taking our work, since the more intelligent the mechanic the more successfully he will be able to conduct his business, for we believe it is an admitted fact, that to the coach-maker, especially, "knowledge is wealth."

This age demands that men of every grade of profession, who would excel, should study and investigate for themselves, all matters connected with their special occupations. Shall the coach-maker be left behind in this march of improvement? We trust not! Give us your shoulder to the wheel; or, in other language, give your assistance in every possible way as writers, subscribers, and *recommendatory* friends in promoting the circulation of this work.

The order of the day is progression, and he who does not wish to be considered "behind the age," must keep up with it. It is not a satisfactory plea, that your Magazine is filled with drafts which if followed would produce vehicles too fine for your market, as some have told us. Should your neighbor choose to follow the pattern that his grandfather did, your better policy is to get ahead of him by getting up a better class of work. We started with the motto: Devoted to the literary, social, and mechanical interests of the Craft; and we are determined, as in the past so in the future, to suffer nothing to swerve us from that path of duty we owe to the public—the promotion of its best interests. With these promises to do our best for the third volume, as far as we are able, we leave the matter in the hands of our friends, after refering them to our Prospectus on page 20.

CONGRATULATORY AND PROMISSORY.

WE cannot refrain from congratulating the craft on presenting them with this number. We are quite sure it is the most valuable we have ever presented them with, and have little doubt that this year will produce the best volume of the series, good as the former have been. We commence in this our friend Scott's "Siftings," to be completed in six chapters, which we think will prove interesting to our readers. The article "Our Dog Charlie," in the Home Circle, is so tender and life-like, in combination with the moral lesson to be drawn therefrom, that it will not fail to instruct and interest the mind. Our mechanical departments are all so full and original that

they are especially valuable. But, why need we particularize, where the fact of the valuableness of the contents is so manifest to all?

With a few remarks concerning the future of this work we shall close. In the July issue we shall begin an article from a new correspondent entitled "Clarence Clifford; or, The Experience of a Journeyman Coach-maker in the Western Country," which the author proposes to embrace in about twelve chapters. Judging from the opening portion this will be the most interesting article we have yet given. Under a *fancy* heading the reader will have *genuine* experience, well calculated to interest our Eastern subscribers, as well as to amuse our Western friends. Gossip for the Paint-shop will occupy about five numbers more. We are sorry it should so happen that we have many continued articles; but asking the reader's patience with us in a matter over which we have very little control, we here promise that every thing shall be completed within the year, and nothing shall be carried into our fourth volume. We expect to give in our next number a portrait and biography of Mr. Robt. B. Canfield of Newark, N. J., probably the oldest member of the craft now living, and some very valuable drafts already in the hands of the engraver. As specimens of literary composition we are sure that the articles we are now publishing will not suffer in comparison with those of any other first class works, published in this country. Our time now being exclusively devoted to the interests of this publication, we think our readers have the guaranty that the future numbers will not in any degree deteriorate.

BASKET-WORK IMITATIONS.

OUR readers will be glad to learn that instead of sending to France, and being saddled with an inferior article, they may now obtain at number 96 Walker street, New York, of a superior finish, any kind of basket-work imitations they may require, suited to either light or heavy carriage panels. In our advertising columns an attempt has been made to give representations of a few specimens; but in addition to those there shown, Mr. Volkert has a great variety, sufficient to gratify every shade of taste. These are sold in boards, about 12 feet by 14 inches, at 75 cents per foot, and may be sent to any address by express.

In addition to these imitations, Mr. Volkert has some six hundred different patterns of mouldings for pianoforte, and cabinet-makers, architects, &c. Some of the machinery employed by Mr. V. (we understand of his own invention) is very complicated and ingenious, and as seen in operation is powerfully illustrative of the ingenuity of man. The manufacture of various patterns of desks, wire, and brass nails—160 of which are made each minute—and the inlaying of mosaic work in wood and metals of every color, and some other kindred employments constitutes this establishment as worthy of a visit from the curious in mechanism.

DIFFERENCE IN TRACK.

A correspondent writes us from Genesee Co., New York, that "the track used in the Western part of the State is 4 feet 7 inches from outside to outside of the felloes."

Another correspondent writing from Cleaveland, Tenn., says, "The wagon-makers here make their wagons track 5 feet 2 inches. I have been making my carriages track 5 feet from center to center."

EDITORIAL CHIPS AND SHAVINGS.

DOCTORS IN SAN FRANCISCO.—Podgers, who hashes up California matters for the *New York Times*, says that just about these days the Medical Faculty of San Francisco seem to be inoculated with a spirit of rivalry in the matter of "turn-outs." As there has been plenty to do in their line lately, consequent upon the great prevalence of scarlet fever, they come out in a grand style. One day some prominent physician appears with a pair of "trotters" and a new wagon; a few days later another emanates with a pair, and a more "stunning" carriage, generally driving himself, with a specimen of colored society on his left; but within a few days several new establishments have appeared, *it being* a pair of gray horses in the morning, and a different color in the afternoon, before a handsome carriage, in "slap-up style." There's no place, perhaps, where doctors get such enormous "fees," and no poor man can afford the luxury of having his legs sawn off.

CASTOR-OIL A PRESERVATIVE OF TIMBER.—The workmen lately engaged in excavating for the foundation of a house in Dayton, Ohio, came upon an old vat put down twenty-three years ago. The site was once occupied by a castor-oil factory, and the vat had been used as a cooler, 12 feet long, 7 wide, and 11 deep, constructed of 2½ inch plank, grooved and tongued together. Filled with stone and dirt, it was found on excavating it that water had settled in the bottom, strongly mixed with castor-oil, which had thoroughly saturated the planks, and left them as sound as when first put down.

LICENSED VEHICLES IN BROOKLYN.—From the 1st of May to the 30th of December, 1859, licenses were granted for 86 hackney-coaches, for which the city received $258; express wagons, 132, at a cost of $396; stages, 25, at $375; city railroad cars, 76, at $1,280; and 519 carts. This goes to show that there is considerable travel in our neighboring city; and when we take into consideration the fact that coach-making there is but a poor business, we are led to suppose that its people are extensive patrons of the mechanical industry of other places.

How a Hackman was Outwitted.—A few days since, a gentleman who had "seen the elephant" had occasion to hire a hack at 11½ P. M., to proceed from Twenty-seventh street to the New York Times office. On entering the vehicle he inquired what was the legal fare, and was answered, "A dollar and a half." He knew this was an overcharge, but quietly requested the Jehu to "hurry down," and ensconced himself on the cushions in deep meditation how to avoid the swindle. While passing the brilliant lights in Broadway, his eye caught the card nailed up in the carriage, and containing the "rates of fare" according to law, and his determination was instantly formed. As soon as the hackman drew up in front of the Times Office, the gentleman opened the carriage door, having the aforesaid card in his hand, and politely requested the driver to "step into the light, and he would settle with him." Jehu followed with alacrity, and expressed no little astonishment at being requested to point out on the card, his authority for charging the dollar and a half. Surprise, indignation, chagrin, entreaty, and expostulation were alternately expressed on the countenance of the outwitted coachee. But all was of no avail, and he surlily departed with a dollar, and the assurance that, if he thought he hadn't enough, he had better meet his passenger at the Mayor's Office in the morning. Moral:—When you hire a hack, look out for yourself and your spare cash.

Patent Champion Carriage-band.—Messrs. Hannah & Storm, of Poughkeepsie, N. Y., have left at this office, for the inspection of carriage-makers, one of the neatest description of carriage-bands yet invented. Closing in front and plated, yet they are designed for all kinds of axles. The cap, instead of screwing into the end of the band and getting loose in a few days' use, as in the old mode, is secured by an ingenious contrivance—a loop at one side and a simple screw at the opposite, requiring but a moment's time to secure the cap in its proper place, after oiling the axle. The effect of this band is to exclude all dust from the end of the axle, and thus avoid the necessity of frequent lubrications, rendering it not only time-saving, but an effective protection to the axle, as well as a pretty finish to a carriage. Messrs. H. & S. are probably the largest manufacturers of bands in every variety in the United States, and gentlemen, too, with whom it is pleasant to deal. Our readers will do well to give these bands their attention.

The Alderman and Hoops.—A corpulent city alderman said a few days ago, whilst riding in an omnibus, seated between two ladies, that he felt like a stave in a hogshead, surrounded by hoops.

An order has been received in Concord, N. H., for twelve or fifteen wagons for parties on the coast of Africa.

The Coach-maker's Letter-box.

The Editor has devoted this Department of the Magazine to the insertion of such epistolary correspondence as may possess sufficient interest for the craft, when the same is courteously worded; but he must not be held responsible for, or considered as indorsing, any opinion herein expressed.

LETTER FROM MISSOURI.

Fayette, Mo., April 2d, 1860,

Mr. Stratton:—*Dear Sir*, In glancing over your "Letters from the Craft," I thought perhaps an item or two from this part of the land might prove acceptable. Times are quite brisk in Missouri, but money is very tight, yet we hope when the spring trade fairly opens, to have the money market easy. In answer to an Eastern friend some days since, I let off the following, and christened it—

AN INQUIRY ANSWERED.

"How passes the time in that Western land?"
Ah, yes, just listen for one moment, and
I'll tell all about the different ways
That I manage to put in time now-a-days;
Of work that is done, and books that are read,
From breaking of morn till daylight has fled,
When I tumble into my bachelor bed.
First—first you must know my breakfast I eat,
Then, picking my teeth as I move down the street,
Quietly, soberly, I never stop
Till I enter into the old carriage-shop
And roll up my sleeves; then pick up each tool,
And sharpen the edges—then pick up my rule,
Lay off my work like the rest of the "craft,"
By making the patterns and drawing a draft.
Next—then there is work in getting out stuff,
(Out here we must get it out from the rough,
Which, as you must know, is found rather tough).
And first of all, I take good old ash,
That which is clear, but somewhat found brash,
For rockers, and pillars, and bars, and dash;
Spruce for panels, and bottom, and seat,
Then some walnut that can nowhere be beat,
For the sides, which look both solid and neat.
These all marked out, I then rip away
With whip-saw and rip-saw for one-half a day;
Then turning about, which you know is "fair play,"
With jack and with jointer I plane up each piece,
Till straight and smooth, and *fits slick as grease.*
Scribe it by patterns, and dress all up true,
Till, as a Yankee would say, "I guess it'll du."
When, framing all snugly with tenon and screw,
(Having rabbeted the rockers and cross-bar too),
I put all together with number-one glue.
Having finished the bottom smooth and tight,
I next plumb the pillars to a craftsman's sight,
And finish the sides and panels just right.
The doors are then cleaned and hung by the line,
Till everything finished—I think, "superfine."
Such are the many and various ways
In which I employ the time now-a-days.
In my room each evening the time I spend,
Sometimes I'm alone, sometimes with a friend;
Be that as it may, I never do fail
To pick up the papers received by last mail,
Then hurriedly reading the political squibs,
I glance at the many editorial fibs,
And searching, the latest news to see,
Of what has happened by land and by sea;
Then lighting my pipe ('tis a comfort indeed
When alone I can burn the Indian weed),
The pages of Gibbon or Tacitus read;
And for variety's sake I scrawl out a rhyme.
And this is the way I put in the time!

Hoping that you may commence your new volume with the success it deserves, I am,

Yours truly, H. S. Williams.

LETTER FROM OHIO.

MEDINA, OHIO, April 16, 1860.

FRIEND STRATTON: When I wrote you last, we looked upon the prospects of carriage-makers as very favorable for the coming season, and just as our hope for selling carriages was strong, one of those untimely frosts came along, and destroyed them; so we had to take in sail, and proceed more cautiously; many of the shops having run from one-third to one-half less hands than usual, consequently many a fellow-craftsman went unemployed. But this spring the prospects are more favorable. Many farmers in this vicinity feared a scarcity of feed, but the spring is opening early, and hay is cheaper than last fall. The winter has been favorable, so we still hope for the good time coming, and I hope it will come for the benefit of those wanting employment, as there appears to be many such this spring.

I think the country is recovering from the general stagnation of all kinds of business which has prevailed for the last five years, and it is to be hoped that the people will take warning, and not run wild with speculation as soon as mother earth again yields to us of her abundance, and the people generally become prosperous. I hope the homestead-bill will pass this session of congress for the good of the laboring classes, and put an end to speculation in the public lands. I think it would have a tendency to lead more men into agricultural pursuits. There is too much mechanical work done at present, more than will sell for prices that will remunerate the builder. Ploughing can never be overdone, and of all pursuits, agriculture is the surest. More men arrive at a competence by taking their axes and marching into the forests, than in any other way. I frequently ask boys that apply to me to learn the trade, Do you know how to chop wood and plough? Their general answer is, Yes! I then say to them, You have a better trade now than you will have after spending four or five years in learning one, and only receiving your board and clothing. But they do not like the drudgery of the farm; misguided youths! they will learn in course of time that there is as much drudgery at their trade as on a farm; and if their only object is to be rid of that, they are only jumping out of the frying-pan into the fire; and furthermore, they will never amount to anything but a drudge any way. It is the apprentice that chooses a trade because he thinks himself possessed of talent and tastes fitted for it, and not to get rid of work, that will succeed; but not the drone that dreads work.

I do not wish to discourage young men from learning trades, only that class that are too lazy to work on a farm. But smart, energetic boys, that have correct habits, that possess sufficient ingenuity to learn a trade, and are willing to make themselves useful, will do well to learn one that suits their taste. In some future number of the Magazine I want to have a familiar chat with the bosses in regard to taking boys as apprentices, and in regard to their duties to the craft in so doing. But my communication is long enough for this time, and I would only recommend to my fellow-craftsmen to subscribe liberally to the Magazine for the coming year, as I consider it every way worthy of our support, and if they will double the present subscription list for the next volume, the editor will feel encouraged to increase his efforts to improve it, and make it more useful and entertaining.

Yours truly, ANVIL.

LETTER FROM LONG ISLAND.

BRIDGEHAMPTON (L. I.) NEW YORK, March 20th, 1860.

MR. E. M. STRATTON:—*Sir*, The track for carriages here is five feet nine inches from outside to outside, which I suppose is wider than in any other place in the United States. I think if there is a reform needed anywhere in this respect, it is on the east end of Long Island, it being so wide that it causes three large ridges in the road; one in the center, and one on each side, between the path and rut.

We make light carriages here to track about four feet six inches, and four feet seven inches, and consequently are obliged to set the shafts on one side,—or set one shaft straight and the other diagonally—in order to make one wheel follow in the off rut and the other in the path, which gives a side-lurch to the carriage, when the rut is deeper than the path, as usually is the case, especially on the by-roads. Ten miles west of us the track is seven feet four or eight inches; but, from South Hampton east, to the end of the Island (thirty-five miles), it is five feet nine inches.

Yours Respectfully, M. B. SANFORD.

RECENT EUROPEAN PATENTED INVENTIONS.

November 21. Pierre Jochem, Paris—Improvements in brakes for railway and other carriages.

November 26. Moritz Auerbach, Berlin, Prussia—Improved apparatus to be applied to omnibuses, stage-coaches, and other similar vehicles, to indicate the distance each passenger travels, and the amount of his fare.

Moritz Auerbach—Improved—Berlin, Prussia—Improved apparatus to be applied to cabs, hackney-carriages, and other similar vehicles, to indicate the number of persons carried, the distance traveled, and the amount of fares.

November 28. Richard A. Brooman, 166 Fleet street, London—An improved poultry wagon.

December 10. Lauric & Marner, 313 Oxford street, London—Improved folding carriage head.

December 12. Richard Emery, 6 King street, St. James' Square, Westminster Square, London—Improvements in carriages for common roads.

December 17. Thomas W. Plum, Blaenavon Iron Works, Monmouthshire—Improvements in the manufacture of tires for railway and other carriage wheels, and of hoops and rings, and in machinery employed therein.

December 19. Edward B. Wilson & Robert S. North, Rotherham, Yorkshire—Improvements in the manufacture of cranked axles, and also of tires for railway and other wheels, and in the machinery or apparatus employed therein.

December 20. Alfred Welch, Southall—Improvements in portable railways, to facilitate the movement of carriages on common roads and other surfaces.

December 20. Perry G. Gardiner, New York—Springs for carriages or railway cars.

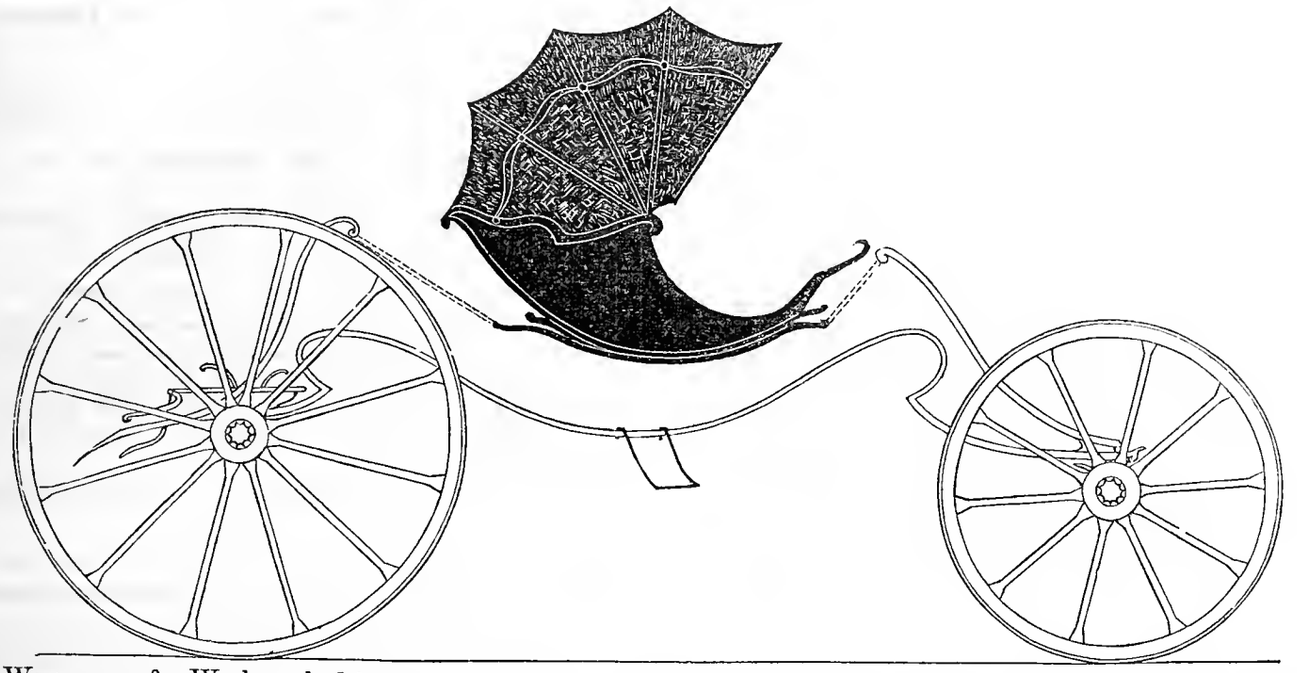
December 22. Benjamin Fleet & Joseph Rawlings, East Lane, and Thomas Cloake, 6 Saville Row, Walworth, Surrey—Improvements in machinery for stopping the bodies and wheels of railway and other carriages, and which machinery is an improvement on the machinery already patented by letters patent granted to Thomas Cloake, dated the 1st March, 1859.

January 9. Robert Mathews, 289 Oxford street, London—Improvements in the manufacture of wheels and axles.

January 10. William H. Thornthwaite, Newgate street, London—Improvements in the treatment and reduction of ores, and in the manufacture of iron and steel, and in the construction and mode of working the furnaces employed in such said manufacture.

January 13. Joseph Hayes, Glocester—Improved break for common road and railway carriage wheels, applicable also to the wheels of machinery for raising and lowering weights.

THE CURIOSITIES OF COACH-MAKING.—NUMBER ONE.



What is it?—We have had in our possession for nearly thirty years a singular-looking drawing, of which the above engraving is a correct representation. What it represents is beyond our research. Its history, as related to us, is, that it was brought from the East Indies by a sea-captain, uncle to the donor, and is, *or was*, known there as "the Budgaroo." Presuming that this account is more apocryphal than true, we offer it to our readers for their amusement, and, if possible, to give them the opportunity for solving our query, Can any one tell what it is?

Note.—We have given the above curiosity as the first of a series; to which we hope to have additions from the craft, of such as they may have in their possession. After use, original copies loaned us for illustration in this department will be carefully returned by express.

INVENTIONS APPERTAINING TO COACH-MAKING AT HOME.

AMERICAN PATENTED INVENTIONS.

March 6. An Improved Method of Securing Handles in Hand-saws.—Henry Disston, of Philadelphia, Pa.: I claim the application of the taper pine, E E, with the screwed ends, and the nuts H, to the manufacture of hand-saws, in the manner and for the purpose set forth.

An Improved Head-rest for Travelers in Railroad-cars, Carriages, &c.—Grey Utley, of Chapel Hill, N. C.: I claim the rest H, supported by the shoulders of the wearer, and having terminations for supporting the wearer's arms, so that the weight thereof shall counteract the pressure of the head against the said rest, substantially as set forth.

March 20. An Improvement in the Arms of Carriage-axles.—A. J. Bell, of Greenupsburgh, Ky.: I claim in the construction of an ordinary compound truss-axle A B C, making each of the arms thereof in two parts A B, and with an oil space I, one of said parts being placed edgewise, vertically, and the other flatwise, horizontally, and both united together by a collar H and screw-nut J, substantially as and for the purposes set forth.

An Improvement in Wagon-jacks.—Lucius H. Colby, of Groton, N. Y.: I claim, first, the described hook and slide for the purpose of holding the lever in its place at any desirable position or altitude when raising the wagon-wheel off the ground.

Second, I claim the so making the hook-shaped prawl, that it shall clamp the rod by its leverage on the rod or slide, and further its turning on the side-rod, for the purpose of suiting the lever when in either series of holes in the plate, as described.

Third, I claim the combination as a whole, when composed of the standard, the plate with double series of holes, the lever, the slide or rod, the hooked prawl, clamping by its leverage at any point on the rod or slide by the action of the side lever, when the said combination is made and operated as described.

An Improvement in Varnishes.—Geo. A. Engelhard, of New York city: I claim the use and application of the solution in question as a varnish suitable for wood, plaster-of-paris, paper, photographs, ambrotypes, and as a varnish upon new metallic substances.

An Improvement in Attaching Thills to Vehicles.—Francis Odell, of New York city: I claim the key D, or equivalent, in combination with the head C on the end of the thill-iron, and jack F having a socket formation on its outer end, as described, for the purpose of forming a coupling for attaching thills to axles, substantially as set forth.

An Improvement in Trace Safety-bars for Vehicles.—Reuben Rolph, of Coventry, N. Y.: I claim, first, The construction and arrangement of the metallic plate and longitudinal road across the thills, the upright posts and rollers between which continuous or connected traces are hitched so as to render, laterally, the arrangement of the lever and sliding-bolt to hold the traces in position for draft, and admit of them being detached instantly, all in combination as specified for the purposes set forth.

Second, I claim as a modification of the above, the double connected vibrators for hitching traces to vehicles, as described for the purposes set forth and specified.

AN IMPROVED MACHINE FOR BENDING WOOD.—Artemus Rogers, of Painesville, Ohio: I claim the employment of a pair of vibrating segments to produce a single bend in a piece of timber, when so arranged and controlled as to commence simultaneously at both ends of the stick to bend it, and by the completion of the process, constitute the mold having a continuous curvature.

AN IMPROVEMENT IN ATTACHING THILLS TO VEHICLES.—A. Sherman, of Poughkeepsie, N. Y.: I claim the slotted semi-cylindrical enlargement B, on the end of the thill-irons, rubber packing E pin I, jaws G, the clip with their slots and the pins A, projecting from the sides of the enlarged portions B, when the same are all combined and arranged in the manner and for the purposes set forth.

AN IMPROVED ODOMETER.—John M. Whitney, of Bolton, Mass.: I claim so constructing an "odometer," that the revolutions of the wheel of the vehicle are registered equally reliably in whichever direction the said wheel may be rotated.

I also claim the combination of a series of ratchet wheels on one center, with a series of operating slide-bars driven by cams on the ratchet wheels, substantially as described, for the purpose set forth.

I also claim the employment of a rubber, or other equivalent cushion, in combination with the yielding castor-holder K, as specified, for the purpose set forth.

AN IMPROVED MACHINE FOR CUTTING FILES.—Dr. Theodore Burr, of Hastings, Mich., assignor to himself, J. B. Lobdell and A. Pelham, of Hastings aforesaid, and H. Burr, of Allen, N. Y.: I claim the use of the cylinder F, constructed as described, in connection with spring-hammers, cutters and files blank-carriers; the whole operating in the manner and for the purpose described.

March 27. AN IMPROVED HUB FOR CARRIAGE-WHEELS.—J. F. Beckwith, of South Alabama, N. Y.: I claim so constructing two metallic plates A A, which are provided with grooves A A, that they will clamp and hold the spokes separate and distinct from each other on their edges, while they are allowed to bear and press against each other on their faces, substantially as and for the purpose specified.

AN IMPROVEMENT IN SELF-ADJUSTING CARRIAGE-BRAKES.—Albertus Larrowe, of Cohocton, N. Y.: I claim the combination and relative arrangement of the rubber Z, and swinging brake-arm C^1, with the end of the brake-bar V, whereby the strain upon the rubber Z, is borne principally by the rigid end of the brake-bar, directly in front of the periphery of the wheel, and not by the hinge of the rubber, substantially as shown and described.

April 3. AN IMPROVEMENT IN FILES.—Pietro Cinquini, of West Meriden, Conn.: I claim constructing a file with longitudinal grooves and a transverse cut, combining with said grooves to form teeth, substantially as described.

AN IMPROVEMENT IN CARRIAGE SPRINGS.—Edward Maynard, of Brooklyn, N. Y.: I claim the double-curved or wing-shaped spring, C, formed with separated leaves, as set forth, and connected at the center-part to the axle by means of the curved chair-clip, or its equivalent, and by eyes at the ends to the bolts, L L, or body-loops, substantially as and for the purpose specified.

I also claim the chair-clip, D, to which the spring is firmly bolted, and which is attached to the axle by the two clip pieces, 3 3, whereby the axle is not injured by bolt holes for the springs, and the weight is distributed on said axle as specified.

AN IMPROVEMENT IN BUCKLES.—John C. Hall, of Fayette, Miss.: I claim the combination of the ends of the belt, band, or hoop, H G, with a frame, A, and bar B, in the manner and for the purpose substantially as shown and described.

AN IMPROVEMENT IN ATTACHING THILLS TO VEHICLES.—L. W. Boynton, of New York City, assignor to himself and Durham & Booth, of New Haven, Conn.: I claim the use of the hook and eye, in combination with the flanged plate and rubber, when the pressure of the rubber against the eye is regulated by means of the flanged plate, with its screw bolt, and the whole is constructed and made to operate substantially as described.

PROSPECTUS OF THE THIRD VOLUME.

THE ONLY WORK OF THE KIND IN AMERICA!

The New York Coach-maker's Monthly MAGAZINE;

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT;

Embracing, monthly, four plates of designs (mostly original) for carriages, ornamental painting, stitching and carving, with an occasional portrait of some distinguished coach-maker, printed in tints; twenty pages of letter-press finely illustrated with numerous engravings on wood; several advertising pages worthy the attention of coach-makers, and a cover; the whole being printed in the best style of the art, on very fine paper, presenting to the Craft the most useful and interesting Magazine ever offered to any branch of mechanical science.

WHEN we originated this Monthly two years ago, we did so with many doubts and fears as to its ultimate success; but, no sooner had our first prospectus gone abroad, than did the response to it in the form of subscriptions, and other evidences of regard, assure us that we had made a start in the right direction. That such a publication as ours is needed, we have sufficient evidence in the steady increase of patronage we have received from the beginning until now. The friends of correct business principles have nobly interested themselves in our behalf, and to-day we feel an honest pride in being enabled to say that among our well wishers we number the most noble-minded men to be found in a civilized community.

We have been told that we have more than redeemed our promises in the past. Will it be asking too much when we invite the confidence of the public in our enterprise on entering upon the third year? We think that our arrangements now are of a nature so complete, that we shall be able to meet every reasonable expectation of the craft, and make our third volume the best we have yet issued.

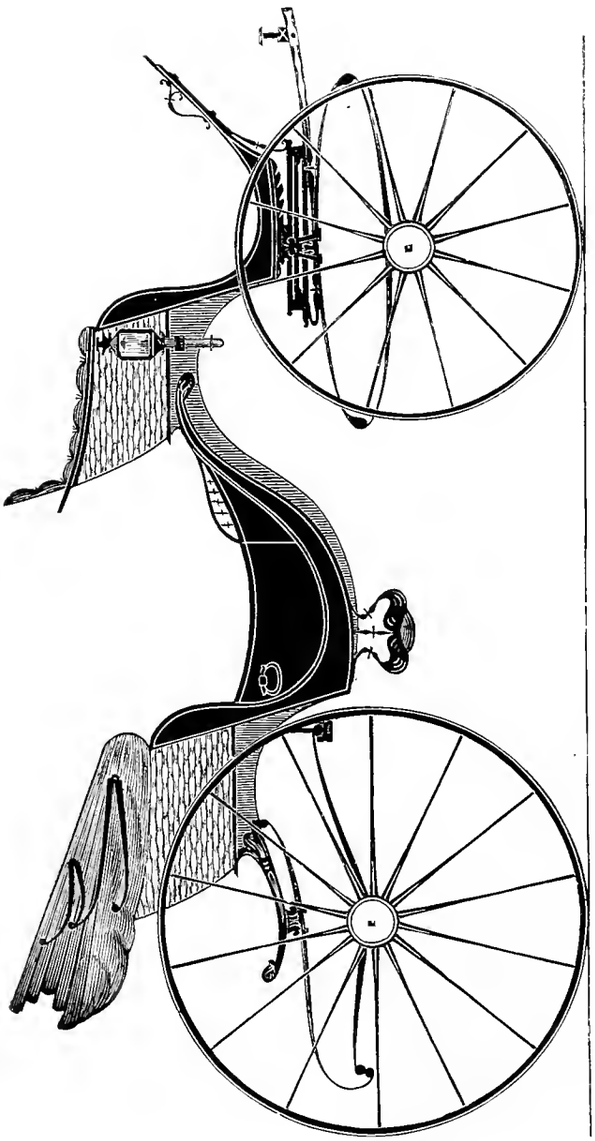
The general plan of the volume for the third year will not differ materially from those that have preceded it. We shall by constant observation and unceasing toil in the field of Mechanics and Literature strive to render it a useful companion in the work-shop of the coach-maker, and a welcome visitor to his home-circle. We think it unnecessary to give in this connection the certificates appended to the first and second volumes, as we are now well known throughout the country for integrity, *and a will* for doing that which is might.

Our terms will remain unchanged, according to the following plan:—

TERMS OF SUBSCRIPTION:

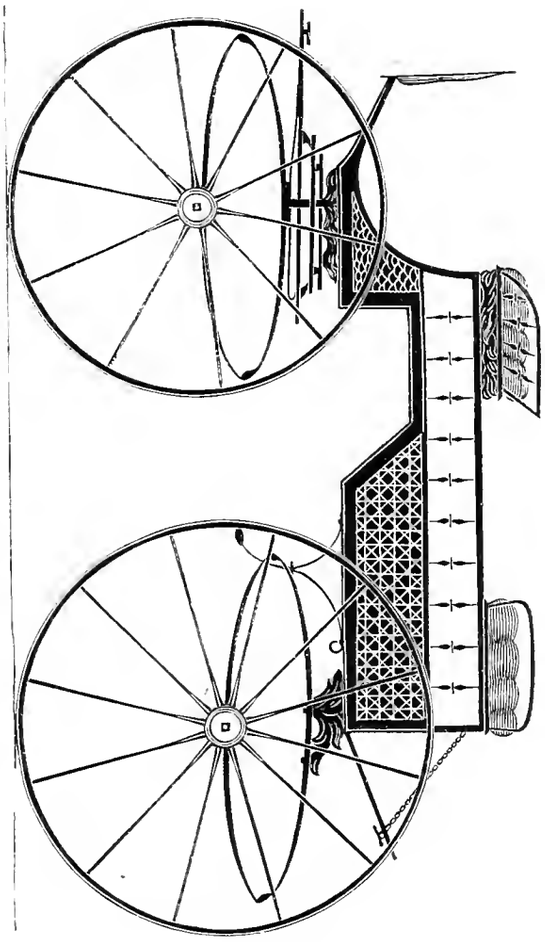
Single copies, $3.00 per year; three copies, $8.00; six copies, $15.00; eight copies, $18.00; ten copies, $20.00. Letters ordering specimen copies must inclose 25 cents. Each Canadian subscriber must send 25 cents extra, to prepay his yearly postage. Payments must be made invariably in advance. All Clubs must be sent to one address, except on removal of one of the parties, when the letter ordering a change must inclose a red stamp.

☞ Any individual *voluntarily* forming a club of eight subscribers, and forwarding us $18, shall have a ninth copy for his trouble. If ten or more, he will be entitled to a bound volume at the end of the year. Any person sending $8.00 shall have the first, second, and third volumes in numbers. For either volume, bound in muslin, gilt, single, $3.50; the first and second volumes together, $6.50.



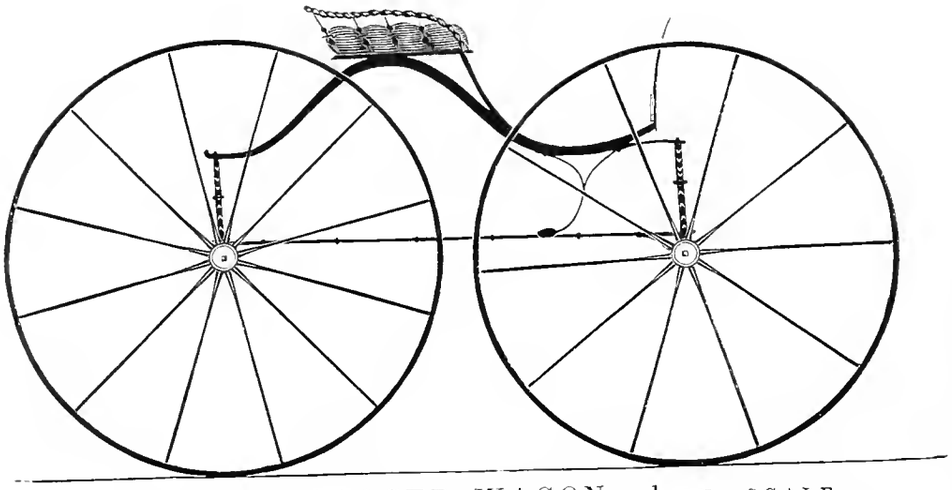
TILBURY PHAETON.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 30.



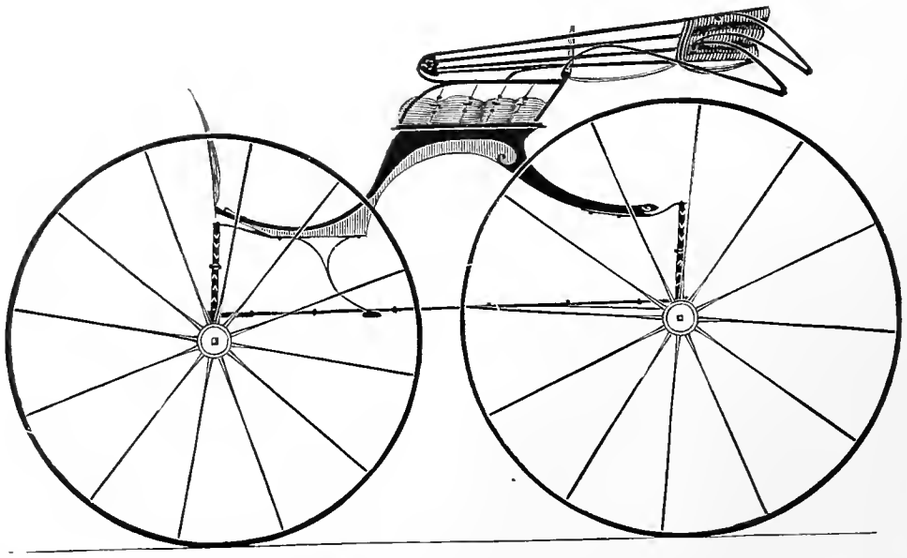
DOG CART —½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 30.



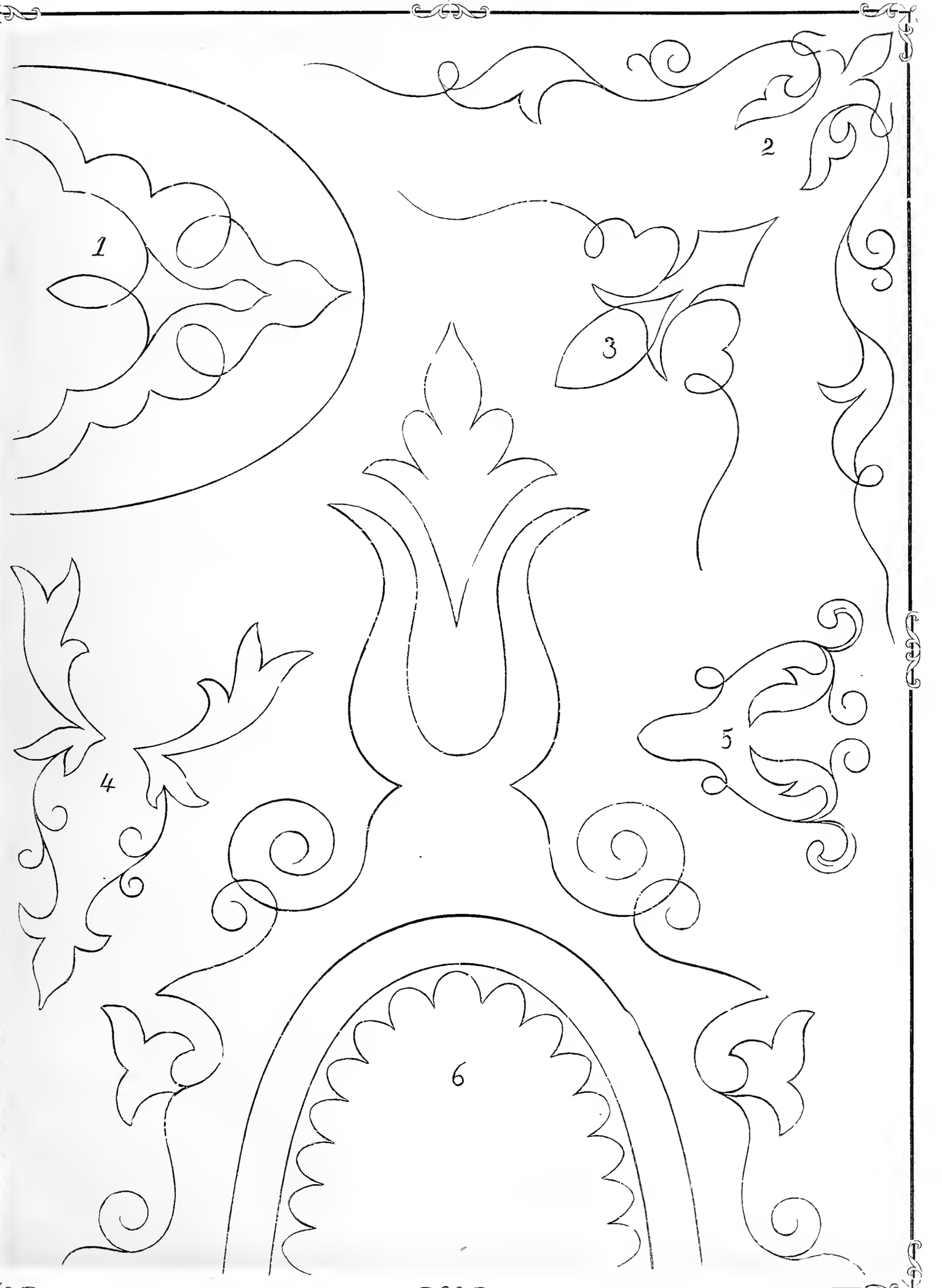
NEW HAVEN JAGGER WAGON.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 30.



ARCHED BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 30.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DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, JULY, 1860. No. 2.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

You have requested me, [illegible] you my experience in the West as a "tramping jour," and as that experience has been somewhat varied during a number of years, it may, perhaps, possess some little interest, therefore, I will comply, hoping that you will not expect too much from such an humble source; and trusting that you will overlook, and freely forgive the numerous faults which I feel I shall commit in the composition of these epistles.

Let us imagine that you are seated by my side, here in my cozy little library, while the coals burn bright in the grate, presenting a scene of domestic comfort which we all love, when the chilling winds howl fearfully round the corners of the house as they do to-night, and the rain patters against the windows, ever varying with the driving blast. Such a night as this always has a sort of mesmeric influence over me, causing a dreamy stupor to pervade the body, while the mind wanders backward in life's ever-changing scene, reviewing the pleasant associations of by-gone years, so indelibly stamped on the tablet of memory. I love to indulge in such a mood, especially if somewhat disheartened, for I always wake up from it, with a stronger nerve and more determined will to engage in life's battle, and overcome the many obstacles in our path; which must be done, if we would succeed in our undertakings, no matter how humble they may be.

And now that you are ready to listen, I will give you my experience as a jour, while *tramping* through the "great West," as we used to call that portion of our country beyond the Alleghanies, when I was serving my apprenticeship in the pleasant Yankee village of B——. Ah me! but those were pleasant times. I wonder if the boys there have as much sport, and enjoy life as well as we used to,—taking the girls sailing out to Long Beach on a hot summer's afternoon, and eating oysters at the old shanty christened, ever so long ago, "the Beach House;" then floating in with the tide by moonlight, and winding up with ice-cream in the famous saloon on Wall street. And then, how well I remember some of our glorious sleigh-rides with a fast horse, tinkling bells, and a fancy cutter, while one of the prettiest little witches imaginable, warmly ensconced in robes and furs, nestled down by my side in such a sweet, confiding way, as to cause the warm blood to thrill through my veins, and drops of sweat to start on my forehead, despite the stinging atmosphere.

But pardon me; it is my experience since then which I would narrate, when like thousands of others, I concluded to try my fortune at the West, and so started out in life with little money, but plenty of energy and ambition, while hope told flattering tales of the future. I sometimes think those hopes have been fully realized, as much so at least as I could wish, for then I was homeless; and I might add friendless—a mere plaything for the adverse winds of fortune, while now—but never mind, I will come to that by-and-by.

I must confess, that I felt very proud when I stood in Ohio's capital city, and reflected that I was a free man —free to go where I pleased, and stay as long as I pleased, free to "loaf" an hour or two when in the mood, without being grumbled at; and free to ask the boss for my wages when I needed a little cash. Perhaps the proudest moment of a mechanic's life is when he first starts out "on his own hook" to engage in the great struggle of life; when he reflects that he has a name to carve out for himself, and a position to obtain in society based upon his own merits; and here was I, just at that age, with a strong, robust constitution, the result of passing my youth among the rough hills of the East, and inhaling the pure sea-breeze, ready to enter the contest and fight manfully for fame and fortune. Some men seem to be Fortune's favorites, and they glide smoothly along on a tranquil sea without an adverse breeze to mar their progress; but I had seen and experienced enough to know, that no such star presided over my birth, and I should have to strain every muscle, else sink forever beneath the turbid current.

Our twenty-first birthday is the period we all look forward to with eager anticipation, and back upon with regret: in the future it is the resurrection morn of hope; in the past the burial-day of youthful joys and pleasures.

With mingled feelings of pride and curiosity I gazed on the different scenes in and about the city; the State House built of huge limestone blocks, with great pillars in front, and the lofty dome that crowned it; the Lunatic Asylum, just out of town, with its surrounding grounds filled with shrubbery and flowers; the immense cornfields in the Scioto bottoms,—all possessed a strange, fascinating interest to me. To be sure, I had seen larger and finer buildings, with parks exhibiting more taste; but you must bear in mind the fact, I was *out West*, with the rock-ribbed Alleghanies intervening between me and my childhood's home, consequently every thing possessed a charm to my eyes, as new scenes ever do to the youthful traveler.

After visiting all the principal buildings, not forgetting the gloomy Penitentiary with the dark waters of the Scioto gliding swiftly by its frowning walls, I concluded to look for a job. There were three shops in the city, and selecting the largest, I entered the office and inquired for the "boss." Having found the gentleman occupying that very exalted position, I politely inquired if he wanted a jour, and I must confess I was astonished beyond measure to hear him answer me with the curt monosyllable, no! Very well, thought I, you don't own all the shops in town, so I'll try somewhere else. At shop No. 2 I met with pretty much the same success; shop No. 3 ditto; but by conversing with a body-maker at the last-named establishment, I learned that a hand on carriage-parts was wanted in Urbana, some thirty miles distant. The next train bore me swiftly to that village, and in an hour after my arrival I made arrangements to go to work at twelve dollars per week. This was not quite up to my standard, the *golden* visions which had previously floated through my mind were not quite realized; but then it would do for a beginning, and give me an opportunity to look about and secure a better situation, should one present itself.

After an early breakfast the next day, I started for the shop to commence operations. It was one of those May mornings which can only be described by the strong adjective, beautiful! taken in its broadest sense. The birds were singing right merrily from the maples and locusts that lined the principal streets, casting a cool, delightful shade over the paved sidewalks, where you could walk at mid-day with one of Nature's parasols spread out over your head. As a general thing a small yard fronted each dwelling, every foot of which was taken up with graveled walks and flower-beds, where pinks of different varieties, lilacs and flowery-almonds bloomed, while above them grew one or two cedar or spruce trees in pleasing contrast with the gothic cottage painted white, and looking *so* pleasant, that it could not be otherwise than the home of contentment and love.

After reaching the shop and putting my tools in order, I commenced working out axle-beds, spring-bars, and perches for half-a-dozen jobs. The perches were crooked, and here was a dilemma, as I was accustomed to machinery for sawing out stuff, consequently I had never used one of those uncouth looking implements known as a whip-saw, and I knew the hands would laugh at me if I used it awkwardly. Fortunately an expedient presented itself, and after using the rip-saw all day, I returned after supper when no one was about the shop, and going to work with desperate energy, I had the satisfaction of doing the work and learning the use of the saw at the same time.

Expecting to remain in the place but a short time, I refrained from going in society, and my only companion was a smith, a warm-hearted, whole-souled fellow, always revolving in his mind some project to obtain wealth by a single *strike*, or, as he termed it, easier than sweating over the anvil, and like most of his class, he generally kept about in the same place.

After our day's work was done we usually took a stroll out of town, our principal resort being a beautiful grove where we would sit down on the green grass which kind Nature spread out like a carpet for us, and there we would speculate on the future, building air-castles of grand proportions, and dazzling magnificence. At times a sense of loneliness would steal over me causing me to feel wretched, and then I would long for the jovial society of B——, where on such an evening, in company with some valued friend I could stroll out on the beach, and watch the waves as they came rolling up higher and higher, or receding lower and lower. This wretched feeling of loneliness has followed me from boyhood like a curse, poisoning my heart's purest fountains.

The summer passed away slowly; but finally the golden beauties of September tinted the landscape around us, and then I began to tire of my situation, and look about for a change. Fortunately a painter in search of employment passed that way, and in a conversation with him I learned that a thriving young manufacturer in the southern part of the State was in want of a good body-maker. Dispatching a letter to him I awaited with some [illegible] ion of [illegible] iately, [illegible] good, s[illegible] s, I bid s[illegible] izens of Urbana as I had the honor of being acquainted with, good by! and returned to Columbus, where my friend the smith had preceded me a week or more. I met him soon after my arrival, and found that he had invested a considerable sum of money in patent locks, for which he expected to realize a large profit. Poor fellow! I afterwards learned that like so many visionaries, he was doomed to disappointment, for he found the locks unsalable, and I doubt not but to this day he has the greater part of them on hand unless, indeed, he has given or thrown them away.

Taking passage on the canal for Chillicothe, I got all my "traps," as a sailor would say, safely on board; then trimming sail, *i. e.*, harnessing the horse, we were soon under way. Finding my fellow-travelers inclined to sociability, I was soon on intimate terms with most of them. As the evening advanced we lighted our cigars and took a promenade on deck. If there is one trait of character more fully developed in the genuine Western man than any other, it is the "faculty" of asking questions—questions prompted by curiosity—in such a matter-of-course sort of way as to draw answers from the most cynical misanthropes. This propensity was duly indulged in, and ere half an hour had passed we all knew where each one was from, where going, and what business he followed. Until the canal crosses the river the scenery is anything but pleasing. Low swamp-land covered with stagnant water extended on either side for miles, while the reeds that grew in bunches to the height of several feet above the water were filled with black-birds, and to-

gether with innumerable frogs, they made the evening "hideous" with their chirping, twittering, and croaking. When my companions had all retired to their "bunks," I lighted a fresh cigar and taking a seat on the deck gave myself up to a sweet, musing reverie. The rippling waters sent forth a low, musical sound as they dashed against the bow of the boat, while ahead of us the stars enriched the ruffled surface with sparkling gems, or as Mrs. Welby so poetically expresses a similar scene,—

"The twilight hours, like birds, flew by,
As lightly and as free;
Ten thousand stars were in the sky,
Ten thousand on the sea;
For every wave with dimpled face
That leaped upon the air,
Had caught a star in its embrace,
And held it trembling there."

Leaving Circleville the following morning directly after sunrise, we passed through a finer country. The beauty and richness of the Scioto valley has been spoken of so often and so well, having been the theme of poets, travelers, and historians, that it enjoys a national reputation, therefore, I will not dwell on the ever-varying scenery,—now passing through deep forests, with the gigantic trees on either bank intertwining their long rugged branches together above us, forming an arched canopy under which we glided smoothly along, anon emerging therefrom, broad cultivated fields appeared in view with the golden corn just ripening in the September sun, while beyond large farm-houses were seen, and rugged bluffs towering far above them. In due time we reached Chillicothe, a city of several thousand inhabitants, beautifully situated on a bend in the river and surrounded with wild, romantic hills, peculiar to southern Ohio. After passing an hour or so in the ancient metropolis, I took a seat in the cars and was soon flying towards the village of Greenfield, which was to be the scene of my labors for—time alone could tell how long.

(*To be continued in our next.*)

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

(*Continued from page* 3.)

CHAPTER II.

The lover of nature can find no richer treat on this continent than a steam-boat trip on the waters of "*la belle riviere*," the Ohio. What the scenery may lack in wild grandeur, is more than made up in quiet, majestic beauty, gorgeous coloring and bewildering variety. Under craggy, verdure-mantled hills are nestled cosy hamlets, casting shadowy duplicates down into the smiling stream. Green vineyards dot the sloping up-lands, rivaling those of Rhineland. Snug farm-houses whose surroundings speak eloquently of plenty, comfort, and content; peep from under arching canopies of beech and maple. The rich, alluvial bottoms bear on their breasts a wealth of golden grain that softens down to actual beauty the flood-resisting bluffs of barren sand. Coal-mine tunnels gape in naked cliffs, and vomit forth on gliding cars the ebon-colored anthracite. Even busy, populous cities are seen rising near at hand, or forming points of interest in the gauzy purple of the distance. Through all glides the winding river, its crystal bosom bearing steamer, raft, and flat-boat, the fisherman's skiff and the clumsy ark of the voyaging trader. Nor are sounds wanting to animate the panoramic picture. The incessant snort of noisy "scape-pipes," the jolly shout of bare-legged raftsmen, the clang of signal-bells from passing boats, the piping scream of water-fowl,—all mingling with the hum of busy industry on either shore, serve to harmonize the sense of hearing with that of vision, and the enraptured voyager is spell-bound with delight. No better illustration of our country's greatness, wealth, and progress could be shown to a foreigner; and no better proof can be adduced to show that our national destiny is expansion; for only three quarters of a century ago that glorious valley was a howling wilderness.

New as is the country, the shores of the Ohio are rich in historic reminiscences and legendary lore. Some of the fiercest fights of that protracted Indian war inaugurated by Daniel Boone and his followers, and only terminated by the utter extinction of the red man, were fought within sight of the stream; and, if old legends are to be credited, it was this part of Kentucky that gave to that State the significant appellation of "The dark and bloody ground." The opposite shores of Ohio, Indiana, and Illinois, the old frontier States, present many points of interest to the student of history, besides affording to the general traveler a passing glimpse of the "granaries of the Union," and on nearing the mouth of the river, the modern land of Egypt with its amphibious capital—Cairo.

Henry Burnet and I enjoyed the trip hugely; he had recovered from the shock his feelings sustained on encountering so unexpectedly the man of all others he had most cause to execrate, and his spirits regained their usual exuberance. Each passing event drew from him some lively remarks. His uncle did not recognize him, or if he did, gave no evidence of the fact; so there was nothing to mar our enjoyment.

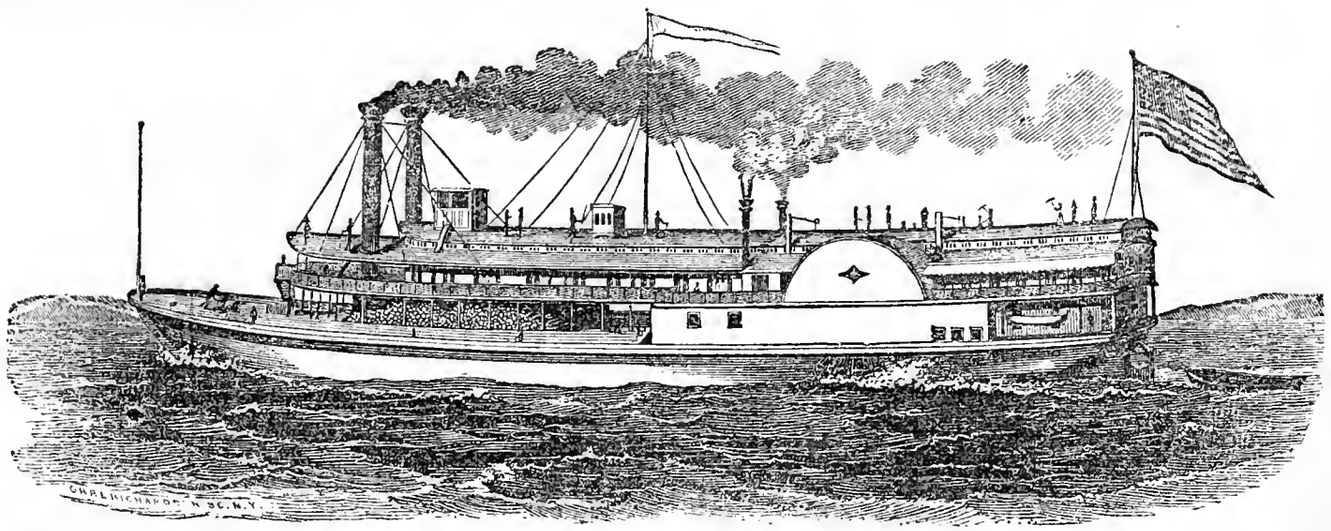
On the evening of the third day we reached Paduca, situated at the mouth of the Tennessee river where it debouches into the Ohio. The town is one of considerable commercial importance, supports one flourishing carriage shop and does a good deal of boat-building. It appears, by a story I have heard of it, that the old-time practice of whipping criminals for petty offenses is still in vogue there—the story is this: A boat bound down the river had stopped at the landing to discharge a quantity of freight, and, as it would be detained half an hour or so, many of the passengers concluded to spend the interval on shore, viewing the sights, &c. Among this number was a deck passenger, a seedy-looking customer, not remarkable for anything prepossessing either in person or manner. Just as the bell sounded for departure this individual was seen streaking it, full split, for the boat. He got on board in time, and, from a certain nervous trepidation he evinced in twitchings about the mouth and shruggings of the shoulders, it was apparent that something had occurred to disturb his equanimity.

"What's the matter, Bill?" asked a companion of the same stripe, who had remained on board.

"Matter enough," returned the fellow with a hideous grimace; "Fast town that ere is, dogged if it ain't!"

"*Fast!*" ejaculated the other, opening his eyes, "I thought it was slower than time."

"'Taint though," said the seedy man, "positively it's



fast—the fastest place I've been in lately. I went up town when the boat landed, stole a pair of boots, was nabbed, tried, sentenced to fifty lashes, got them, *and here I is!*"

"Jer-i-co and jews-harps!" cried his comrade, "I'm glad I stayed on the boat."

Leaving Paduca, we entered the Tennessee river, and night shut out the view shoreward. There were dark storm-clouds gathering on the southern-horizon—clouds that looked inky-black against the starry back-ground of sky; and, as the threatening masses were piled higher and higher, vivid spits of flame burst from their sides and the murmurs of distant thunder echoed through the darkness. Gusts of wind came moaning through the skirting forests, rippling the surface of the water and sending crested waves flapping against the hull of the boat. The clouds drifted nearer—the lightning flashed fiercer—the wind howled in fury, and a perfect torrent of rain descended, driving all on deck to the shelter of the cabin. The captain deemed it prudent to head the boat for the shore, and tie up until the storm abated; for river-boats, with their lofty tiers of cabins and low hulls, are far from safe in a high wind. Every one seemed dull, so my companion and I retired to our berths, which were in the same seven-by-four room, and were soon lulled to sleep by the ceaseless patter of the rain on the deck over-head. I was awakened after a time by the noise of getting the boat under way again; it had stopped raining, yet, I saw, through the glazed door opening to the gang-way, that it was still very dark. I closed my eyes, but the sleep I courted was slow in coming; gradually, however, it stole over my senses, and the regular vibrations of the engine were merging into a continuous, soothing hum, when the whole fabric of the steamer suddenly trembled under a strong concussion, the force of which nearly hurled me from my shelf-like bed. It was accompanied by the sharp crashing of timbers, and, in a few moments, by hurried words of command, and quick trampling of feet I sprang from my berth, and my companion was on his feet at the same instant. *Quick!* cried I, hurrying on my clothes, something serious has happened—the engine is stopped and—Heavens! see how the boat leans over! A wild tumult of shouts, shrieks, and cries of despair now went up from every quarter, freezing the very blood within me, and filling my soul with dread. Here, I cried, snatching a couple of life-preservers that hung on the partition, put one of these on, quick—quick for your life! The face of Henry Burnet was singularly calm, though pale, and no muscle quivered as he strapped the "preserver" about his shoulders. We hurriedly left the room by the door that led outward to the guards; day was just breaking, and by the dim, uncertain light we looked on a scene that no pen could adequately describe. The boat had struck a snag that pierced the hull, and even penetrated through the lower deck, thus holding her fast by the bow, and leaving no hope of running her ashore. We were near the middle of the river, the boat was sinking, there was no hope of succor from the land, for no dwellings were to be seen, and the obvious danger, nay, hopelessness, of our position sent fear to the stoutest heart. It was but too evident to the calmest that *all* could never reach the shore in safety. The passengers, men, women, and children were clustered about the guards with horror-stricken faces, or rushing hither and thither in the wildest dismay calling for help, or gibbering in their terror like maniacs. The officers and crew, or those of them who had not already taken to the water to swim ashore, were working with frantic energy to launch the life-boat, while twice the number of people it would carry stood ready to spring into it the moment it touched the water. Men were seen unhinging doors and shutters to form rafts, and women were imploring them with streaming eyes to save their little ones.

"Can you swim?" said I to my friend, when we had taken in at a glance the terrible state of affairs.

"Yes," he replied, "I 'm a good swimmer."

"Then let us take to the water, it is our only hope of salvation—come on!" and I approached the rail for a plunge.

"Hold on," cried he, seizing me by the arm, can you go and leave these women and children to perish without making an effort to save some of them?"

I felt my cheek burn with shame as I met his reproachful glance, and I answered promptly:—"You are right, we ought to help them first and ourselves afterwards; we are both stout and able, so here goes to do my best—come!"

As we started from the spot the "after" part of the wreck commenced going down rapidly, and amidst renewed cries of alarm many of the wretched passengers sprang into the river, trusting to life-preservers and pieces of wood to sustain them. At this time the life-boat was got afloat, and with great coolness the captain resisted,

even with blows, the rush of those who sought to enter it; and pushing off with four of his crew commenced picking up those who had madly thrown themselves overboard; for, as is generally the case in such disasters, they were mainly those who could not swim a stroke, indeed, some of them were females.

"Now is our time to be useful, cried Henry, many of them will sink before the boat can reach them unless they have help, so now for it!" and he leaped over the rail into the water. I followed his example, and together we struck out for those nearest us. We were both good swimmers, and with the additional aid of the life-preservers, rendered good service in conducting those who were perishing to the boat, and sustaining others until it reached them. It was soon filled to its utmost capacity, and started for the shore with all possible speed, leaving us, at our own request, until it came back. We turned to see how it went with those still on the wreck; it was settling towards the bottom fearfully fast. With a hiss the water reached the boiler-furnaces, wreaths of vapor shrouded the forward part of the boat and a loud crashing told that the cabins were parting from the hull. Amidst startling cries the water was again dotted with human beings; and the sight almost paralyzed us.

"God help them," said my companion, "for I fear we can't; but let us do our best."

I saw a woman clinging to the neck of a man, and both were sinking, so I swam to their assistance; it was John Burnet and his step-daughter. As I neared them the lady stretched forth her arms and tried to speak; she failed in that, but the look was enough. I disengaged her arm from the neck of the man, and placed it around my own; then telling him to swim for his life, I struck out for the shore. I had not gone far, however, when I heard the voice of Henry Burnet calling my name, I turned, and saw that he had secured a large piece of the shattered wreck, capable of sustaining a dozen persons, and had already assisted several to mount it. I directed my course towards this improvised raft, and deposited my fair burden thereon. She was still perfectly conscious, and her face beamed with joy when she discovered that her mother was among the rescued. Hearing a faint cry for help behind me, I turned in that direction and saw the face of John Burnet just sinking from view; my companion saw it, too, and with a few vigorous strokes he reached the drowning man. I went to his assistance and we soon placed him beside his wife and daughter. Many of the passengers had secured other pieces of the floating wreck; and those of them who could swim were not slow in assisting their fellows; so that before the boat returned all who had not sunk to rise no more were in comparative safety. Our ultimate rescue was now only a matter of time, and there was no lack of energy on the part of those in charge of the boat in making quick trips to and from the shore. All the survivors were finally landed; and, upon counting them, it was found that only thirteen had perished. This result seemed truly marvelous, when the terrible confusion that had reigned was considered; and the many re-unions of friends who had thought themselves forever separated was very affecting. Many knelt on the river-bank and returned thanks to Heaven for their deliverance, and tears were not wanting for those who were lost.

As nothing was saved but the scanty apparel we stood in, it behooved all to reach, as soon as possible, the shelter of a roof and the warmth of a fire. Some one said there was a plantation about a mile distant, so the dripping, shivering company started for the place. Many of the ladies were so exhausted as to need support, and I offered my arm to Burnet's daughter, saying, with a laugh intended to cheer her drooping spirits, that I hoped she would excuse my wet garments. She smiled sadly, and took my arm, remarking that she owed me a heavy debt of gratitude which, at some fitting time, she hoped to acknowledge in a proper manner; to which I answered that the best way to do that would be to say nothing more about it; if, I concluded, you have any superfluous thanks to offer give them to the inventor of life-preservers, for without them our strength or skill would have availed us but little.

The sun was up and shining brightly when we reached the planter's house, where we were hospitably received and every attention paid to our wants. A party of negroes, headed by the overseer, were sent down the river to pick up any valuables that might float ashore from the wreck, and an express was sent to the nearest town for supplies of clothing. I had some three hundred dollars in gold belted about my body, in which way I always carry my money when traveling; so I sent for a change of costume for myself and Henry. We remained there two days, when another boat came along on which we took passage for our destination. John Burnet and his family concluded to go the balance of their journey, some sixty miles, by land; so I bade them farewell. Ellen, the daughter, was profuse in the most hearty expressions of gratitude, and warmly hoped we might meet again. She desired me to thank my friend in her name; for Henry had persistently held aloof from the family, and she had had no opportunity of addressing him in person. Mr. Burnet pressed my hand on parting, and thanked me, with greater cordiality than I expected, for the service I had rendered himself and family; then seeing Henry standing at a little distance he approached him, and commenced expressing his obligations in warm terms. My friend listened to him in silence until he concluded, when he said sharply:—

"I saved your life, you say?"

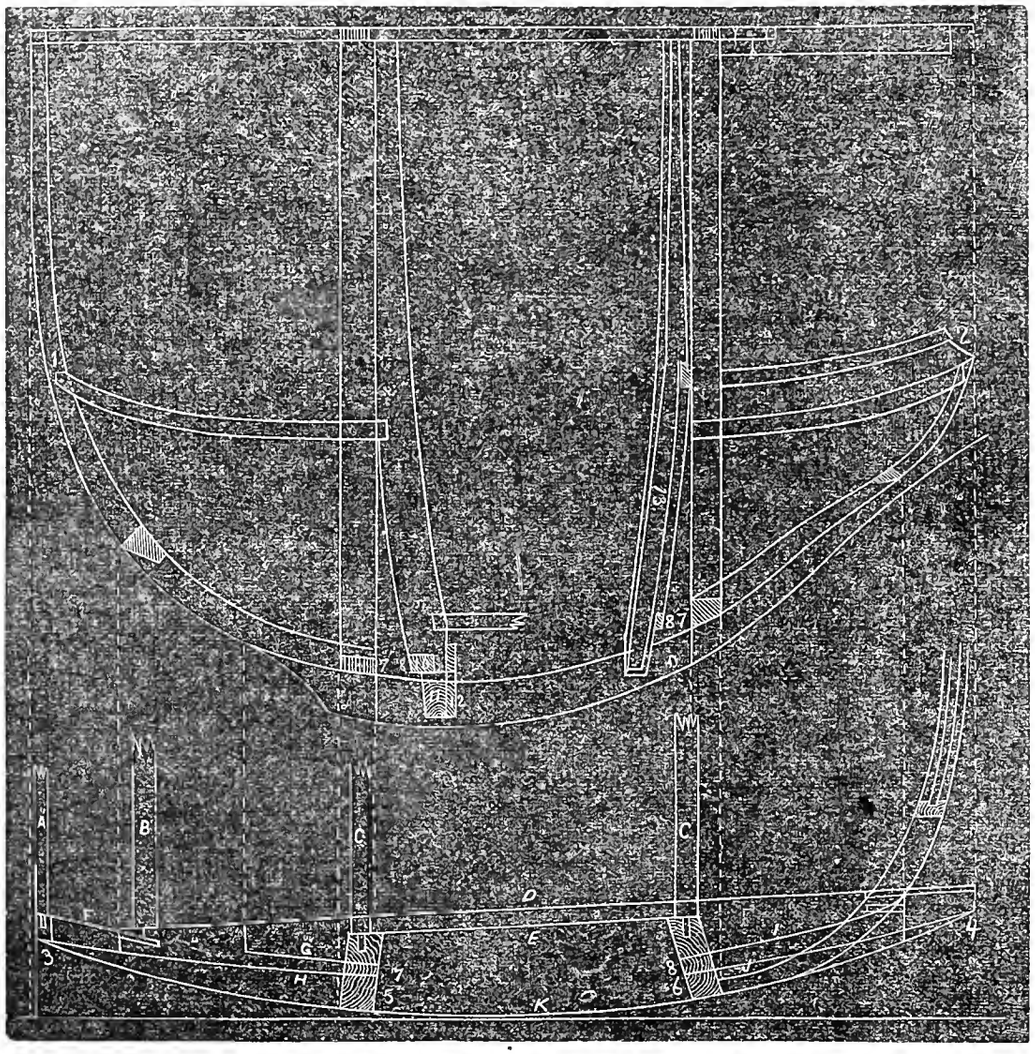
"Yes," said the old man, evidently astonished at his manner.

"Well, it is more than I *ought* to have done. My name is Henry Burnet, and so was my father's before me. *You* robbed him of all his hard-earned wealth, and reduced our family to want. Your villainy broke his heart—killed him, and though the law cleared you, his blood is on your head—you are a *murderer* in the sight of God and man—do you hear *that!* You are a *murderer!*"

He paused a moment as if to control his rising passion. His face was purple with suppressed emotions, and the veins on his forehead stood out in blue knots. The old sinner stood riveted to the spot, his face pale as ashes and his head bowed upon his bosom.

"My mother," continued Henry, in hoarse, irregular tones, "used to tell me to return good for evil; in your case I have done so—I have done you a service that all your gold could not have bought, and I hope the memory of it will rankle in your bad heart until the last hour of your existence. You owe your life, and that of your wife, to the son of him you robbed and *killed*—remember *that!* I paid you part of what I owed you, years ago, and now you have got the balance—we are square, sir, now.

(*To be continued.*)



ROUND FRONTED COACH WITH DOOR GLASS TO FALL TO THE BOTTOM OF THE ROCKER.—$\frac{3}{4}$ IN. SCALE.

ENGLISH CARRIAGE ARCHITECTURE, NO. II.

PROCEED with this as in the example on page 4, by getting the extreme length of the body from 1 to 2, and lay it down on the cant-board.

2. Lay down the cant-rail line, as shown on the cant, from 3 to 4, but to be determined by the width on the seat and boot, and the turn-under and side sweeps.

3. Take the width of the door as between 5 and 6.

4. Strike the hinge-pillar square from the outside, both pillars thus looking uniform, being better for the concealed hinges, allowing the door to open further back; also, making the door-pillars the same size on the inside; strike the sheet pillar as previously described.

5. Determine the amount of turn-under for the standing pillars 7 to 8, as shown on the body; this is very particular, as the slide of the glasses will show, having to fall into the rocker part of the door-bottom, with just the panel on the outside and the casings on the inside, to prevent a bulky appearance in the door when open; when open it will be necessary to draw out a section of the door-pillar, showing the slide of the glass and blinds.

6. Next, lay down the distance from the cant-rail inwards, and the amount of the turn-under, and then draw the sweep from 3 to 7 and from 7 to 4, as seen in the diagram.

7. Get the thickness of the rocker, leaving sufficient on the inside, say $1\frac{1}{8}$, to carry the plate and support the bearing. There should be no more upper-work than is necessary for the glass to fall into.

8. Strike the inside line for the hind-corner pillar.

9. The rocker as shown on the body with the bottom-side fixed on the top; 10 is the bottom-side, 11 is the outside portion of the rocker, and 12 the inside portion. A represents the back-rail; B the bottom bar; C C the seat rails; D inside of solid rocker; E outside of the rocker in the doorway; F inside of the corner pillar; G, I, the outsides of the solid rocker; H outside of the bottom side; J outside of the bottom side; and K the outside of the cant-rail. The glass and blind slide is shown at 13.

This example is a very important one, and may be studied in connection with our example on page 165, Vol. I, and that on page 123, Vol. II, perhaps, with advantage. As we stated in our previous article, we are indebted to our English cotemporary for this series. Our next number will give the Cab-and-Phaeton body, with a cant-board attached.

Translated from the *Mercure Universel*, for the N. Y. Coach-makers' Magazine.

REVIEW ON LONGCHAMPS.

ON Good Friday—a most brilliant day for a promenade on Longchamps—a moving crowd of carriages, horses, and liveried footmen, during four hours consecutively, passed as we wandered up and down, like an anxious writer in search of matter for his chronicle, from the Place de la Concord to the Arc de l'Etoile, not bestowing our patronage on any moving vehicle in the race, nor on those, even, on exhibition by the carriage manufacturers, in great numbers there.

Do not ask us to describe to you the sumptuous dresses of the people, more or less eccentric, which trailed along the ground, and tried the people's tastes on the subject like the cut of a new coat, or some fantastic headdress, or some other new fashionable article. We had eyes, and an opera-glass, to view the vehicles which naturally enough attracted our curiosity. We are fond of handsome carriages, and we often dream of the form the prophet Elijah's carriage had, as the legend saint raised it towards heaven across the burning space.

It was beautiful weather. In the middle of this thoroughfare, four or five carriages, with four horses each, went gliding by, some on eight and some on platform springs. The fashionable equipages were distinguished by very long and very high bodies—in reality they possessed a noble and dignified appearance. However, their heavy look seemed to us to destroy their *tout ensemble;* for we saw large phaetons driven by persons who were certainly made up of the most perfect gentry, and these phaetons had the front wheels as high as the hind ones. These four wheels, of a huge height, gave these carriages the appearance of a charlton equipage.

Think, then, we were astonished—on referring to the narrative we have given of this unfortunate phaeton, which belongs to the carriage establishment of M. Dailly, keeper of the post-horses of Paris, rue Pigalle, near our office; but what astonishes us the most is, that we have known these gentlemen of the post, and had supposed them refined and tasty enough to appreciate what is handsome and of superior taste, and to cause them to abstain from exhibiting anything so hazardous and, we will take the liberty of saying, so ridiculous. We would wager that these gentlemen were not so badly educated as to originate such a mean specimen of a carriage.

Furthermore, we would remark—as a person reporting the fashions—that there were some Prince Alberts which were caned, and others of basket-work, with an English fore-carriage (*avant train*), all well enough constructed, constituting a luxury which seems to be appreciated. There were a great many caleches with plated mouldings on the belt and bottom-sides, some Duke and some elegant Victoria chaises; also, some equipages from large establishments of sufficiently good construction; but, what excited our curiosity the most, was the painting, of which the shades were so much divided that it was difficult to perceive what color took the precedence; however, the garnet carmine displayed the most taste.

For the New York Coach-maker's Magazine.

CARRIAGE-MAKING IN LONDON, ENG.

BY X Y Z, A LONDON CORRESPONDENT.

LONDON, April 4th, 1860.

DEAR SIR:—SOME time ago I promised to write you some account of Coach-making in England, and more especially in London. The season in London ranges from about February to July, while parliament is sitting and the queen and nobility reside in London. About July, the queen and court go into the country, the nobility and gentry, according to their tastes, take to yachting, traveling, sea bathing, or a residence on their estates, till the following London season. Londoners also get away for relaxation; so that the metropolis is almost deserted by those who can afford to make a holiday, sometime between July and November, while the weather remains fine. This is the dull season for coach-makers. Till the return of the court, they occupy themselves in selling second-hand carriages to country customers, who find this the best time to invest their money to advantage. They also prepare and arrange their stock, so as to take advantage of the flush of work that comes when the sun shines.

The tendency in England is to produce carriages cheaper, and also lighter than formerly; indeed, ten years have completed a total revolution on the carriage trade in England: not only have the court and nobility adopted economical habits, and insist on cheap carriages, but they carry no luggage, as was formerly the case, when carriages had to sustain great weight, both of passengers and luggage. The cumberous court carriages of former times are being gradually abolished, and instead of the rich linings, laces, fringes, and elaborate heraldry usual to the carriages of the nobles, light vehicles, furnished only with a crest, take many ladies of rank to the court of our Gracious Sovereign.

The changes of construction, and consequent depreciation of stock, were a heavy blow to the master coach-builders; many of the large houses must have lost in this manner from ten to twenty thousand pounds sterling. The trade having now recovered from this blow, is in a more healthy state, and many of the larger establishments are well employed.

There is a drawback to the trade in England to this extent,—that customers never like to see a duplicate of their carriages anywhere, whether in color, size, or shape. They insist on something different from their neighbors; and some over-particular client will want one-eighth inch taken off here, or one-quarter inch added there; so that, in consequence of these continuous changes, hand labor almost necessarily excludes steam power, which requires work to be made without variation, to make it pay. Were coach-makers here enabled to put in hand, say fifty carriages of one sort precisely alike, or seventy of another sort, all parties might be benefited; steam power would become universal, carriages might be make cheaper, and workmen and employers would be better paid, from the rapidity of the manufacture, and the frequent turning of capital.

The best London carriages are not only very highly finished, but are so soundly put together, that many are kept in use that have been running (with periodical repairs) 25, 30, and even 40 years; however, after 25 years, it is considered cheaper to buy a new carriage that to continue to repair the old one. Most of the Broughams built by the best houses when they were first introduced, twenty years ago, are still at work.

The wages of London workmen vary much, according to their skill, and the amount of work they can turn out. Body-makers range from 30s. to 60s. per week; carriage-makers the same; painters from 24s. to 50s.; trimmers from 30s. to 50s.; harness-makers and budget trimmers 24s. to 40s.; harness-sewers less; wheelers 28s. to 50s.; smiths 36s. to 60s. and more; vice-men 24s. to 50s.

The hours of work are from 6 A.M. to 7 P.M. in summer, allowing two hours for meals; and from daylight till 7 P.M., for the rest of the year; leaving on Saturdays at 6 P.M. The painter's time is one hour less, daily. As there is much variety of talent among the men, so does their wages vary. Not only does the very best work come from London, but also the very worst; so, few need remain unemployed, if they are willing to work for what they can earn, irrespective of other causes.

The workmen mostly belong to Friendly Societies, which support them during illness, or when unemployed, under certain conditions as to paying regular weekly contributions, fines, and conforming to the rules. Besides these benevolent objects, they combine others, such as fixing a tariff of prices at which work may be accepted at certain houses, while out of this charmed circle of em-

ployers, men may work for any wages they can get. This is a cause of frequent embarrassment to the masters, as they are placed on an unequal footing towards one another; one employer may be offered an order he cannot undertake at a profit, while his neighbor may do the same work with a similar set of workmen, and get a fair profit out of it.

The masters, in 1856, founded a benevolent institution for distressed members of their class, either masters, foremen, or clerks, and now assist twenty pensioners with sums varying from £10 to £25 yearly, besides affording assistance to those in temporary misfortune, at the monthly meetings of the committee. The annual income now reaches £500, and the money invested, £3,000. If, at any time the workmen's society should place itself in a position of direct antagonism or opposition to the masters, they would have a nucleus on which to form a society to protect themselves; but they consider it would be very unreasonable to do so unless forced to such terms as would ultimately ruin the trade,—first to employers, and then as certainly to themselves; a spirit of good feeling between all classes being morally, socially, and religiously best for all parties.

We have reason to believe that in the United States, both workmen and employers retain greater individual independence, and will not submit to be governed and directed by a committee sitting periodically at a public-house or an hotel. In England, the trades-union committees act so despotically to their own class, that the men are effectually compelled to obey its mandates, by slight annoyances in or out of shop, or even by personal violence, that the supreme law of the country can seldom interfere with effect, and then only in flagrant cases.

Our styles and make of carriages we believe to be well suited to the wants, habits, and even prejudices of our customers; we believe yours to be the same for yours; but we also believe that a friendly interchange of ideas, work, workmen, and employers, would benefit all concerned. Not only would your smart and rapid modes of work and design give us many useful hints, but our plans for adding comfort, convenience, and symmetry, would, we think, meet the approval of your supporters. In any case, a state of mutual, friendly criticism and information would make each appreciate the best points of his opposite neighbor's ideas and character; while his faults might be mildly glanced at and corrected. An interchange of raw materials, tools, patterns, and finished parts, would afford many hints on many subjects, and I can hardly doubt that if an enterprising employer or workman would visit the old country, the craftsmen on this side would give him a hearty welcome, and set him in a straight line for making the best use of his time, and seeing the lions.

[We are highly pleased with the spirit and tone of this letter from one of the most distinguished carriage-builders in London, and take occasion to recommend some of its "ideas" to the thoughtful attention of our English cotemporary. We are sure that a little "friendly criticism" would serve to secure an appreciation of his opposite neighbor's best points, and so promote the mechanical interests of the craft in both countries. We regret that the extreme modesty of our correspondent forbids our giving his name to the public; but we may say in conclusion, that he is the originator of some of the most important recent improvements in English carriages.—ED.]

The Home Circle.

For the New York Coach-maker's Magazine.

REMEMBER THE DEAD.

BY ANNIE M. BEACH.

FORGET not those who slumber now
Within the silent tomb,
Never again to greet, with us,
The springtime in its bloom.

The beautiful, who passed away,
While yet their years were young;
Still twine the flowers they used to twine,
Still sing the songs they sung.

Each keepsake that they used to love,
When they were with us here—
The well-worn book, the faded flowers,
Still cherish them as dear.

And speak of them when ye are met
Where they were wont to be,
"Not lost, but only gone before,"
Beyond Death's unknown sea.

The good, the beautiful, the true,
They were in kindness given,
To walk with us a while on earth,
And then were called to heaven.

Still speak of them when ye are met
Where they may meet no more,
For now they wait to welcome us
Upon the heavenly shore.

CAMBRIA, N. Y., *May*, 1860.

For the New York Coach-maker's Magazine.

PUNCTUALITY IN BUSINESS.

BY WILLIAM DOLBY, M. D.

So many maxims and arguments have already been brought forward, all more or less ably designed to encourage a reasonable observance of punctuality, that we can scarcely expect to achieve any remarkable literary brilliance while adding our voice to the aggregate monitorial influence of the press on such an important topic.

For our part, we shall continue to consider that punctuality should be ranked among the highest moral virtues; not merely for its own merits, but for those numerous parallel good qualities which its presence so surely and favorably indicates. The man we find to be punctual must necessarily be clear-headed and business-like, among all his other habits. The man who is not found punctual may be fairly considered as either ignorant of the value of time, or else the willing slave of some banefully secret influences; and thus, from either inference, we may know that such a person can not be safely depended upon in those matters of importance which almost always require their stages of progress to be well timed, so that the ultimate advance shall be harmoniously concurrent with the business generalship of their projectors and promoters. In short, the man who is not punctual can never be trustworthy as an associate, either as leader or subordinate.

Therefore, shun the unpunctual man. He drags his devious days along in society like "the fifth wheel to a

coach." His principal feats in business seem to be upsetting the calculations and apple-carts of other people, as he blunders through his erratic route. "Procrastination is the thief of time," we are told. Time, some day, squares the account, for time is the greatest wealth we have intrusted to our stewardship. Seneca has remarked that "it is a virtue to be covetous of time," and a little covetousness of *that* kind would be beneficial to society at large.

In a worldly view, punctuality certainly gives weight to character. The individual thus honored acquires a calmness of promptitude which enables him to drive his business instead of being driven by a confusing hurry. Punctuality may be compared to packing goods in a box: the judicious packer will not only pack twice as much in the same space, but what he does pack will ride safely in motion with a compact fitness. The unpunctual man leaves everything "lying around loose," and is all the time expecting some crash or break down, either in crockery or carriage wheels.

Another merit in punctuality is its power of propagating by the reflex action of moral influences. Whoever has dealings with punctual persons will almost imperceptibly become pleased with its advantages, and commence a reciprocating benignity of manner in relation to appointments; thus leading to a conscientious observance of all moral obligations. The promises or appointments of the unpunctual man are like the notes of an insolvent debtor or a doubtful bank. There is, therefore, no uncharitableness in our saying that the unpunctual had better be avoided as much as possible.

We have known, occasionally, some sudden demonstrations of punctuality among the unpunctual; but, being more accidental than intentional, they did not illustrate the glorious principle of punctuality for which we are now contending. Among the whims of the unpunctual is their occasional startling adherence to the moment of some trifling appointment, when it happens to suit their own convenience! These sudden surprises remind us very much of "the homage that vice pays to virtue," and thus we may observe how the conscientious regard for a promise shows all the more honorably by having a base imitation.

A due deference for punctuality leads to a thoughtful husbanding and disposal of our time. Seneca's idea of the virtue in becoming "covetous of time" has been amplified by a modern poet.

> "Where is that thrift, that avarice of time,
> (Blest avarice!) which the thought of death inspires?
> O, time! than gold more sacred; more a load
> Than lead to fools, and fools reputed wise.
> What moment granted man without account?
> What years are squandered—wisdom's debt unpaid?"

Hence we may perceive that punctuality is not only a virtue, but leads, by its moral alliances, to the most important principles of action in man's compound nature teaching us to mark the steps of time properly while we proceed on our inevitable road to future accountability.

With considerations so sublime, we need not wonder that all truly great minds have given us either writings or examples in honor of punctuality. That great trio in our national history—Washington, Franklin, and Lafayette—see the records of their individual adherence to the habits of punctuality! We know, from the general tenor of all their conduct, that those glorious men were not so much punctual because they were great, as great because they had always been punctual. In fact, punctuality belonged to their noble characteristics, no matter whether their names ever became famous or not. Punctuality is the sure sign of true greatness, whether in a senate, a battle-field, or a workshop.

One of our best writers—the lamented William Wirt—has well observed—"We can not all be Franklins, it is true; but by imitating his mental habits and unwearied industry we may reach an eminence we should never otherwise obtain. Nor would he have been the Franklin he was if he had permitted himself to be discouraged by the reflection that we can not all be Newtons." Here we have a charming appeal to our emulative elements; but, apart from that, a clear proof in favor of methodical habits.

The man whose movements are—as people in country towns very aptly observe—"like a clock," may thus be distinguished as "a rising man," that is (no matter for present difficulties or other surrounding circumstances), a man who is "bound to rise;" and, when he has risen, is "bound to shine" in any exalted station; because his habits of punctuality have already qualified him to act with dignity in any important capacity.

In a social view punctuality is always admirable, for it leads to a well-ordered household. Following the sacred proverb, that it is not the early rising but the well-ordering of the day which conduces to happiness, we may observe abundant evidence that punctuality is the true "point of honor" in society.

Happy is that household wherein the trusting wife confidently says—"Well, if my husband does not return at the time he said he would, I am sure there must be some good reason for his absence!" Happy are the children who begin life with a "pat hands—papa come home!" and afterwards time their opportunities for play by saying—"I know what o'clock it is, because father's come home!"

These are but collateral illustrations, however, of our subject—punctuality in business. The greatest minds and the best pens have endeavored to advocate it, but positive proofs keep occurring every hour, or minute, in the business of a day. A notable instance was lately brought to light by one of the most respectable and "ancient" evening newspapers in the city of New York. It appeared that one of our most honored "merchant princes" had been a regular subscriber to the paper for sixty-three years! The statement "went the rounds" with various complimentary comments among editorial columns. When nearly all had had their say, the worthy editor of the evening paper aforesaid "came out" with a quiet paragraph in his usual persuasive way, and added that the gentleman thus subscribing for so long a time had also "*called every year and* PAID *his subscriptions!*" This was a clincher.

As we have just completed our second volume and now commenced the third, we commend this worthy example to our large and extending circle of subscribers as one of our contributions in behalf of advocating punctuality in business.

AGRICULTURAL AND MECHANICAL ARTS are the most important in their bearings, since they affect the interests and welfare of mankind. In fact the science of agriculture could never have been so fully developed as it is without assistance from mechanics, so that there is a fair exchange between them, mutually beneficial to both.

Pen Illustrations of the Drafts.

TILBURY PHAETON.

Illustrated on Plate V.

THIS engraving is from an original drawing by a new artist, the general design of which possesses novelty sufficient to recommend it to our readers. In its combination will be found the features of the Tilbury and Phaeton; hence the name we have given it. The side panels are imitations of basket-work, which, if properly painted and finished, will impart a novel and tasty look to the carriage. The pump-handle, it will be seen, is a departure from the old, conventional form in common use, and as here arranged is new. We think that we hazard nothing in saying, that a carriage after this design, nicely got up, would constitute a salable carriage to any one of our enterprising subscribers. We shall not enter into any details as to the painting and trimming, because we believe every practical carriage-maker will exercise his own judgment in such matters.

DOG CART.

Illustrated on Plate VI.

SPORTING carriages are now coming into such general use in this country, that we are sure our friends will be pleased with the original design here presented. The front portion of the body is designed for French imitation basket-work, such as our friend Volkert, of this city, is prepared to furnish ready-made at a low figure, superior to any imported, as may be seen in our advertising department. The back quarter is intended to be caned. The trimmings should be of enameled leather; and while the body may be painted of some dark color, we think that in a carriage of this kind, the under carriage should be a cream or some other light-colored paint. This kind of vehicle in Europe, is put to many useful purposes, besides that of hunting.

NEW-HAVEN JAGGER WAGON.

Illustrated on Plate VII.

THIS is another phase of the buggy *tribe*, lately come into favor with some of our New-Haven friends. We believe our friend Dikeman has the credit of its origination. The name "Jagger" is from an individual of that name, once popular as a buggy manufacturer in the State of New Jersey, although this differs entirely from any he ever made. The construction of this buggy is very plain, the body being formed simply of a pillar and crooked pump-handle rocker, on which a common stick seat is mounted. The pump-handle and pillar may both be bent in connection, from one piece of timber. It makes one of the lightest kind of vehicles, and requires but little expense to trim.

ARCHED BUGGY.

Illustrated on Plate VII.

ARCHED-shaped buggies, although not so strong, or capable of being made as light as the tub body, yet allow of shorter turning. For this particular reason they still find favor with a certain class of customers. The *panel* portion of the body may be worked out of solid whitewood, and the *rocker* of ash. The rockers will need careful plating to render this job efficient.

Sparks from the Anvil.

EXPERIMENTS ON THE STRENGTH OF STEEL AND WROUGHT IRON.

THE experiments recently made by Messrs. Robert Napier & Sons, comprised trials of 90 steel bars, 195 iron bars, 80 steel plates, 150 iron plates, and 25 iron straps, making a total of 540 specimens. The experiments were conducted by Mr. David Kirkaldy, and have been recorded and tabulated in great detail, and the results published in the current volume of the transactions of the Institution of Civil Engineers in Scotland. The following embraces the more important results:

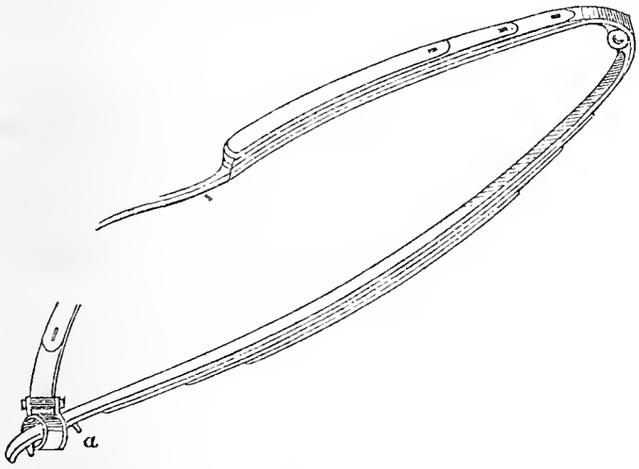
	Average breaking weight per square inch of original area of section. Lbs.	Average pr centage of stretching as compared with original length.
6 Bars of Turton's tool steel, from Arcadian iron,	132,909	5.4
4 " Jowitt's tool steel,	132,402	5.2
8 " " chisel,	124,852	7.1
4 " " steel for drifts,	115,882	13.3
4 " " double shear,	118,468	13.5
8 " Bessemer's tool,	111,460	5.5
4 " Wilkinson's blister,	104,298	9.7
4 " Jowitt's tap steel,	101,151	10.8
4 " Moss & Gamble's rivet steel,	107,286	12.4
4 " Naylor, Vickers & Co.'s "	106,615	8.7
4 " Krupp's bolt steel,	92,015	15.3
4 " Shortridge, Howell & Co.'s rolled Homogeneous steel,	90,647	13.7
4 " Shortridge, Howell & Co's forged Homogeneous steel,	89,724	11.9
4 " Jowitt's spring steel,	72,529	11.0
2 forged bolts of R. Mushet's steel, sent for experiment,	75,119	16.3
6 bars Mersey Co.'s puddled steel, forged,	71,486	19.1
6 rolled bars Blochairn puddled steel (Glasgow),	70,166	11.3
6 forged bars Blochairn puddled,	65,255	12.0
4 forged from rolled bars,	62,769	9.1
8 steel plates, T. Turton & Sons, cast,	95,299	7.68
12 Naylor, Vickers & Co.'s, cast,	84,435	17.41
10 Steel plates, Moss & Gamble's, cast,	72,338	19.73
10 " Shortridge, Howell & Co.'s Homogeneous metal,	96,715	8.77
1 " Shortridge, Howell & Co.'s Homogeneous metal,	96,989	14.40
6 " Shortridge, Howell & Co.'s 2d quality,	72,994	4.57
8 " Mersey Co.'s puddled ship,	93,209	2.02
5 " " hard,	93,979	4.08
4 " " mild,	72,366	5.94
2 " " ship,	71,532	3.57
10 Blochairn puddled,	93,316	3.14
4 " " boiler,	85,010	6.18

The results of a number of other experiments on bar

iron are recorded, beginning with the Low Moor iron, with a breaking weight of 60,364, and ending with an iron of which the breaking weight is 44,758 lbs. The results of experiments on iron plates and iron straps are also recorded.

NEW MODE OF COUPLING PLATFORM SPRINGS.

The accompanying engraving is designed to illustrate a new mode of coupling the back platform springs of bretts, coaches, &c. Instead of employing the shackle to connect the side and cross-spring as formerly, the end of the side portion has two projections, as seen on the draw-

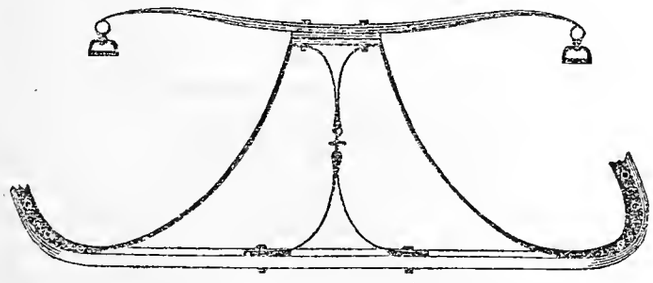


ing, around which a ring of 1½ by ½ inch, iron, passes, thus connecting the two together in a novel manner. This ring is lined on the inside with gutta percha, which is secured in its place by rivets. The easy motion imparted to the spring by this arrangement is very pleasant, and is considered to be a very great improvement, which it unquestionably is.

ARRANGEMENT OF TILBURY SPRINGS.

Tilbury springs, it is true, are not much in use in America, yet we have thought proper to illustrate one for the benefit of some readers.

The feature of chief interest in our engraving is the



central stay, designed to have the *collar* plated. The outside stays and plate intended to strengthen the parts where the shafts lap are united, as will on inspection be readily perceived.

IRON TRADE IN SWEDEN.

As iron is the principal branch of Swedish industry, and certainly that which is of the greatest interest to our readers, it may be as well here to give a brief description of the Swedish irons, which are of various qualities, each mine having distinct properties. They may be classed under three heads:

1. The Danemora irons, which are the most valuable, and of which nine-tenths are used in England (almost entirely in Sheffield), where their value varies from £25 to £34 per ton. The whole quantity made at all the Swedish forges where those ores are used, only amounts to about 4,500 tons, and the recent convulsions in the commercial world have had no effect upon their value.

2. Next in estimation to the Danemora irons are the numerous brands which are used for steel and other purposes, for which their good quality renders them desirable. For the sale of these irons, Sweden depends upon the state of trade in England and the United States. In 1857, these irons were worth from £15 to £19 per ton in England, whereas in 1858 their value decreased to from £13 to £15 per ton. In a good state of trade, these irons have a higher value than the third class of Swedish irons.

3. These are commonly called "assorted bar iron," or "common Swedish iron." When, however, trade in the two principal countries where the second class of iron is used is depressed, the common irons have a higher value, as they find a market in every part of the world. The price of common Swedish irons was in Sweden, at the date of Mr. Grey's report, from £10 to £13 per ton.

During the two years preceding Mr. Grey's report, Mr. Bessemer's process of making steel had been tried at Edsken, near Hœgbo, in the province of Gefle, upon a larger scale and with more success up to that time than in any other country, and great results were then anticipated—results that, we doubt not, will be little short of being fully realized. The steel so made is already in practical use in Sweden, where a species of Swedish steel, called in England German steel, has hitherto been employed for general purposes, for which cast-steel only is used in England and other countries where manufactures are in a more advanced state. At the manufactory of Messrs Bolinder, at Stockholm, the tools used are mostly of Bessemer steel, and those persons that manipulate with them say that they are as good as is required.—*London Engineer.*

HOMOGENEOUS STEEL.

As the homogeneous steel manufactured by Shortridge, Howell & Co., is now in our market, it may be useful to those who try it to state what has been found the best way to work it. First, it is a kind of cast-steel, and, therefore, liable to be burned if too much heated. Powdered borax, which has had the water burnt out of it, is used in welding it; but in this case the welded part becomes very hard. The best remedy is to heat it to a warm red, and bury it in pine sawdust, which keeps it hot longer than anything else, and gives it a soft temper. Ashes is sometimes used, but sawdust is found much better.

When thin pieces are to be welded that are liable to move apart and become cool before the weld can be made solid, it is found useful to punch holes and put in a small

rivet, an eighth or three-sixteenths diameter, to hold the ends, so that the welding may be done quicker.

Tires made of this steel are not shrunk on, but pressed or driven; it being preferable, in order that the steel may not be hardened in cooling off.—*Am. R. R. Review.*

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page* 12.)

SHOULD the reader not have the back numbers of this *Magazine*, the remarks in this chapter must appear desultory, and out of place. To fully understand them, reference must be made to the articles they treat upon. If you have not the back numbers, procure them by all means, so that you may understand the "whole story." The short article on "Varnish," at page 112 of the first volume (which I take to be from the pen of Mr. James Scott), will not suffer by any number of opinions which the subscribers of this *Magazine* may venture to express, nor yet from any space the Editor may think proper to appropriate to it. Varnish *does* play antics when it takes a notion, and no mistake, and the case of the two bodies was not such an uncommon occurrence as to call forth the strictures in the June number of the 2d volume, which I am glad to see have not been replied to. Any man that takes interest enough to communicate his troubles to this *Magazine*, should have sufficient interest and care, not to varnish work in an open, dirty room, nor yet to keep his brushes in old glass tumblers, stuck together with white lead. I have not only had two different bodies varnish badly, but the one body will often be as variegated as it is possible to imagine. The question will bear a full investigation, and I hope neither the Editor nor the reader will deem me tedious in my remarks upon this subject.

That the state of the atmosphere in the room you varnish in is the principal cause of varnish going bad, no one can deny; and this may be remedied, to a certain extent, by any one taking the trouble. Varnish should always be used in a clear, dry air, and all parts of a room should be of an equal temperature. It is owing to this lack of precaution, that some parts of a body will be bad while others will be good. The east side of a shop—if it have a thick brick wall—will often retain a moisture and dampness; so much so, that should a body be varnished in close proximity to it, the side near the wall will be pitted, but the other side remain good. A friend of mine, who has manufactured varnish for upwards of twenty years, thinks it requisite to have a current of dry air pass through the varnish room. I think there is something in this, for I have known varnish to act badly on the doors and backquarters of a body, by putting the door of the body back, too near the quarter, and so to all appearance not allowing a sufficient current of pure air to intervene,—while every other part of the body was satisfactory. I think it as frequently happens in consequence of the varnish you lay it on not being compatible with the English. To substantiate this, I have seen bodies with two different makers' varnish upon them, and in rubbing for the last coat, it has been rubbed through to the first coat, and in such places it has turned bad, and upon the last coat it has remained good, and *vice versa*. Another thing may be, the material the brushes are kept in does not agree with the varnish used. Thus I have known the parts of a body first varnished go bad, and when the brush has got clear of the obnoxious substance, the remainder to be good. Some men keep their varnish brushes in oil, others in water, others prefer varnish, others turpentine. To make a sure thing of it, I think brushes that are used for English varnish should be kept in English varnish, made by the same maker. Brushes that are used for American varnish should be kept in the same varnish; and should it get too thick, allow turpentine to flow upon the surface, which will prevent the varnish from gumming around the top of the bristles. I keep my varnish brushes in turpentine, and one hour previous to using them, take them out and scrape as much out of them as possible; then twirl them between the palms of the hands until they are dry, afterwards laying them between two sheets of clean paper; and by the time I wish to use them every particle of turpentine has evaporated, so that I have what is similar to a clean new brush. Keeping them in this way suits me first-rate; any body objecting, is welcome to his own opinion.

I think it often happens that the painter mistakes the state of the atmosphere. Because the weather is dry, warm, and even hot outside, that is no reason why the atmosphere should be dry and suitable for varnishing inside. This is especially so in cities and towns situated upon the borders of the Atlantic; which are subject to those chilly east winds which blow in the hottest of weather, giving sufficient cause to so capricious a substance as English varnish to play all the antics it is charged with. Often, on what we take to be hot, dry days, the atmosphere confined within four brick walls is anything but dry, but almost always close and muggy. The best and only thing, to guard against being deceived, is always to varnish in a room with a fire in it, if it only be a small one, and when the temperature is certainly not less than 70° Fahrenheit. For five years I have been occasionally troubled with the pitting of varnish; and the last two years I have made it a rule—no matter how hot the weather might be—to have a small fire, and, if possible, to allow the body to stand five or six hours in a warm room, before varnishing, so that on placing the hand upon the surface the warmth of the fire is fully perceptible on the body. Since adopting this plan, I have never had a single failure. I have had partial failures, when at the beginning of a body I have had a good fire, and not wishing to recruit it during the process of varnishing, have allowed it to get so low as to be past recruiting, so that the latter part of the body varnished, if not badly pitted, has had a flat, dead, subdued appearance, as I have every reason to think, through the room being cold and the varnish getting chilled. At other times I have had the room so hot that men from the other parts of the manufactory could not remain a minute in such a temperature, the glass, in my judgment, being nothing less than from 100° to 110°. This is not only foolhardy upon the part of the workmen, but acts in a great measure the same as though the room had been too cold. In some cases, work that has been varnished in such a temperature, with the best of English body-varnish, has not had that brilliant shine to it which might be expected, which leads me to think that too much artificial heat is equally as bad as too much cold, and a current of pure, dry air passing through a room (not upon the work varnished) so excessively heated, might be beneficial.

Mr. Geo. P. Tinker has not given one solid reason why one of the two bodies should turn out bad.* It is absurd to say that by passing a wet buckskin over the surface of a varnished body, the varnish so passed over would retain enough moisture to affect the varnish applied! What little dampness it would impart, would evaporate in the time he was laying down his chamois and taking up his brushes. In my opinion, a tacky surface would not retain so much dampness as a hard, dry one. If anything caused Mr. Tinker's job to pit, it was in the varnish not being sufficiently dry,—being "tacky," as we term it. You can never make sure how a coat of varnish may turn out if put upon a tacky surface.

He is equally wrong in his conclusions as to the varnish crawling upon the body named. Had he passed his wet buckskin over that body, he would have found it would have saved him the trouble of taking it into the sun (not because it wanted dampness), and to have passed over it with dry curled-hair, or even your hand, would have been sufficient to brake the surface. The fault did not lay in the temperature of the varnish upon the body, nor yet with the varnish about to be applied; but the varnish upon the body was composed of ingredients which made it dry with a smooth, glossy surface; and by taking it into the sun, it made the varnish sweat-out, and a little tacky, which "kind of" broke the surface, and made the varnish given adhere to that already on. The system which he advocates in the September number of the first volume, at page 72, he here denounces, for the bad body might have been "caused by using half-boiled varnish, or by adding too much raw oil," which, if either were used, would be more likely to turn it bad, than the article used for keeping the brushes in, from dirt and filth—we mean all dust and dry matter which is capable of forming a sediment in varnish. This would not cause varnish to "pit," as Mr. Tinker would have us infer; but, if the "varnish brush was full of *oil* and settlings from the bottom of the cup," it would certainly go a long way towards helping it. Neither does the dampness of a surface, no matter how damp, cause the pitting of varnish without the atmosphere is of a corresponding nature. As I said before, varnish will not retain moisture and dampness. You see when washing a beautiful varnish surface, after wiping it well with a chamois, the effects of the water, which almost instantly disappears; and it is just the same with varnish when rubbed. The water has no more power to penetrate it, than if it had a shining surface. The cause is, the dampness falls upon the new-laid varnish, and so causes the trouble so much complained of.

My individual opinion is, that to prevent varnish from pitting, a dry, warm atmosphere is the first and most requisite thing to be desired; next, a hard, dry surface to lay the varnish upon; and, lastly, the room to be kept at an even temperature during the whole process of varnishing, and until the varnish be properly set, the painter having a due regard to the material he keeps his brushes in. No varnish room is complete that is heated with a stove which has to be replenished several times during the day to make a varnish room unexceptionable. It should be heated either with a furnace or by steam, so that an even temperature can be maintained. If a stove is used, it should be one fed from the front, and not from the top, as is most generally the case.

* See page 11 of Volume II, in the article, "*Reasons why Varnish Pits.*"

That it is, or ought to be, natural for every man to value his health and strength above every other treasure this earthly existence of ours confers, most men admit; but how often do we see unthoughtful, although intelligent, men as it were inviting disease and misery to take their abode in their frail constitutions. This is particularly so with a great many men following the occupation of carriage-painters. As though the noxious vapors which paints, oils, varnishes, and turpentine, ill-ventilated shops, exposed sheds, surrounded with stinking cess-pools, and putrid matter generally, were not enough to guard against, they are never so happy as when their hands and arms are bedaubed with some of the various materials, many of them of the rankest poison, used in the trade. Men that travel through the workshops with paint so thick upon their overalls, as to resemble the skin of the Rhinocerous, and with hands so bedaubed that the color of the skin is scarce perceptible, ought never to expect to enjoy the blessing of good health. That men following this avocation are obliged to use those injurious substances we admit; but by a little minuteness, carefulness, and forethought their bad effects might be abated we all know; and when our friend Jas. Scott recommends the readers of this Magazine (page 152, Vol. I) to lay on carriage-parts a coat of lead, and to "smooth it off with the hand," it is written without a forethought of the evil consequences such a practice may entail upon the operator. Where is the employer, though he be ever so humane, that would, or could, compensate a workman for the loss of his hands or arms; and there are hundreds that this dread calamity befalls. A case has lately come under my own observation. A house painter who was losing the entire use of his arms through using white lead, was advised to leave the business and go west to engage in any trade his crippled and unfortunate condition would enable him to undertake. Even my own personal experience is anything but flattering for me to think upon. I often feel a dead numbness in my fingers, and the joints of my hands do not have that elastic, easy movement I could wish they had. In striping or writing, when long continued, a cranky rheumatic pain, with a dry husky feel, soon takes possession of my fingers, which makes me dread thinking of the consequences. If the reader will take the humble, though sincere, advice of a well-wisher, he will never submit to have his hands perform that to accomplish which there are proper tools made. I understand it is compulsory in some shops to rub lead in with the hand; but no man that has any regard for his fellow-man would ever allow, much less insist upon, such a practice.

Employers seldom consider the health of their workmen in constructing and planning their factories. Perhaps it is not needed so much by any other branch as in the painters'. But well-ventilated rooms are desirable for all hands', and in building new shops or making additions to old ones, a little forethought, exercised at the proper time, might be conducive of comfort and health to the workmen for generations to come. As I have been a victim of an ill-ventilated shop, I shall give my experience for the benefit of others. The shop I held a situation in for over four years, was composed of a mass of old buildings, in ruins, and only fit for the "devouring element," with leaky roofs and floors, dilapidated and broken windows; in some parts the foundation giving way, until the workmens' benches formed "an inclined plane." What

doors there were lacked three or four inches of fitting the bottom and top, and at some entrances no doors at all, but merely rat-holes to creep in and out of. Additions of first one old building and then another had made such an in and out, up and down place of it, that all strangers who once *got in* had to be *guided out*. Some portion of the ceilings were from six to seven feet high, others from sixteen to twenty feet, no system, no regularity, some parts one story, others two and three stories high—nothing more than so many old sheds—unfit for cattle to live in, much less for human beings to work in.

The room I worked in was over the blacksmiths' shop, a brick building with a leaky floor. The consequence was, a great part of the smoke and sulphurous gas some five or six fires created, arose to the ceiling, coming through the floor and into the paint room. This was always a great annoyance, for I knew it could not be healthful. I worked for upwards of three years in this unhealthy room, never feeling in the best of health, but not having occasion to "lay up." In consequence a gradual weakness of the stomach came on, until I was obliged to succumb, and by the advice of friends I placed myself under the care of one of the most skillful physicians of the homœopathic school, either in this or any other country, who pronounced my case bilious colic, caused by using white lead, although I did not use one pound per month at this time. He advised me, if attacked again, to quit the business, that is if I had any desire to live,—for four days I vomited a green, bilious bile, with my strength so reduced that I could not turn over in bed, and my stomach so weak that half a teaspoonful of water would distress it. After the fourth day the vomiting stopped and I began to get a little nourishment, and in some three weeks from the first, resumed work again.

In the course of three months I underwent the same process again; had the same medical attendance, but recovered a few days sooner; and in about five or six months after was laid up once more. This time I consulted a regular physician of the old school, and one I had great confidence in. He was of the same opinion with the homœopathist, that lead was the cause. He prescribed for me; and the medicine gave me so much satisfaction, and relief in so short a time, and that thinking there may be others—"brothers of the brush"—in a similar situation, it induces me to ask the indulgence of the editor for occupying so much space with these remarks; but should any readers of this magazine be troubled with symptoms usual to the painter's colic, take one teaspoonful of medicine, prepared from the following recipe, every three hours, or as long as vomiting lasts. I doubt not it will show satisfactory results.

℞	Sulph. Morph.	gr. iss.
	Sodæ Sup. Carb.	ʒ i.
	Aq. Menth. Vir.	℥ i.

Directed to be well shaken before taken.

I have tested it for over three years, and, from the confidence I have in it, and in the hopes of its relieving the sufferings of some of my fellow tradesmen, I, with the permission of the editor, place it on "file." Although the doctors gave it as their opinion that my case was caused by lead, and the symptoms those attendant upon painter's colic, I always had the presentiment that the impurity of the atmosphere caused by the smoke and gas from the fires below were the greatest cause; and from the excellent health I have since enjoyed, I am confirmed in that opinion. After recovering from the last attack, and working some four or five weeks, I left the business for seven months, but have been following it again for the last two years and have never had any serious return. At times when varnishing in an over-heated room, or sandpapering dry lead, a bilious gas collects upon the stomach; but by taking one spoonful of the above mixture at the time of retiring for the night, all is right by morning.

Young men who have the privilege of selecting their own trade, or parents who are responsible for the trade they choose for their children, should not only consult the taste and inclinations of their boys, but should consider their constitutions, and know whether that harmonizes with the profession they wish them to follow; for there is no denying it, all kinds of painting are anything but healthy occupations. Those following it should always have a thought to their system, for the evil effects may steadily creep upon a man for years, and keep undermining his constitution and he not perceive it; but the time will come when he will be compelled to submit and take his chance of recovery. For those that painting does not agree with, a free passage through the bowels, with a good digestion, is the most desirable thing to be obtained and, when this has to be brought about by medicine, cold drawn castor oil stands preëminent as a purgative for persons using lead, for the same reasons that a slice of fat pork is better than a beef-steak, as the greasy coating it imparts to the stomach may prevent a coat of lead taking its place. If a stimulant must be taken, I recommend, from experience, good old bourbon whisky. All stale and windy liquors, as ale, porter, and cider, should be avoided. A little personal cleanliness will do more to prevent lead colic than all the medicine you could swallow. A man who is constantly among lead should never eat a meal without first brushing his teeth, the brush to have a little grain of salt upon it. His finger nails should be properly cleaned, at least, once a day, and a bath taken as often as convenient, say three times during the week.

The celebrated Dr. Buchan in his "Family Physician," in speaking of colic caused by working among lead gives the following advice, "To avoid this kind of colic people must shun all sour fruits, acid, and austere liquors, &c. Those who work in lead ought never to go to their business fasting, and their food should be oily and fat. They may take a glass of salad oil with a little brandy or rum, every morning, but should never take spirits alone. Liquid aliment is best for them, as fat broth, &c.; but low living is bad. They should frequently go a little out of the tainted air, and should never suffer themselves to be costive."

(To be continued.)

PAINTER WANTED.—Our readers will remember that Messrs. Winter & Stafford, in the June number, called for an ornamental painter. Those in want of the job will please address them at Schoharie C. H., N. Y.

COACHES IN AUSTRALIA.—The coaches employed between Geelong and Ballarat are drawn by six horses, and carry from 35 to 40 passengers, making the run in six hours and a quarter. A new eight-horse coach on the route has accommodation for sixty passengers; and one on the Castle-maine road carries fifty.

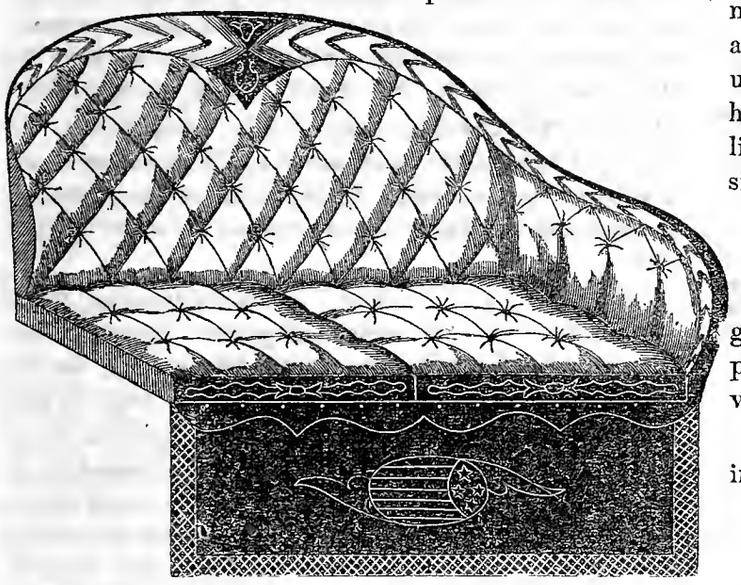
Trimming Room.

For the New York Coach-maker's Magazine.

GOTHIC BACK CARRIAGE LINING.

SPRINGFIELD, O., April 10, 1860.

MR. EDITOR:—*Dear Sir*, Enclosed you will find what is called a Gothic Back Lining, made of leather. Regular carriage trimmers will understand from the drawing how to make it without much explanation. The diamonds on the back are laid off with more fullness than in the ordinary or common diamond mode of finish, so as to form a swell in the center. There is a separate roll above the

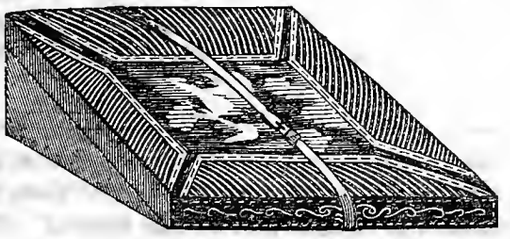


shell-work, so as to make a neat finish. Have the drawing properly shaded, and I think it will make a neat job for your Magazine. Yours, respectfully,

R. J. BECK.

CUSHION FOR DICKEY SEAT.

THE convenience or comfort of the coach-driver has heretofore been but little studied. The illustration we present in connection with this article is designed to show the reader a great improvement in the trimming of this important portion of a carriage. The central portion of



the cushion is formed of enameled leather, from which diverges strips of heavy, ribbed velvet cloth, extending in every direction to the edges of the cushion, where it is secured to an enameled leather edging, as we have endeavored to show. This is something decidedly new, and we think our readers will pronounce it a very great improvement over the old mode of finish.

PRESERVING LEATHER.

MOST persons are in the practice of washing their harnesses when they wish to soften the leather, and afterwards hanging them in the sun to dry. They generally follow the drying process with a saturation of whale oil, which is a quick process for destroying them entirely. Now, this is all wrong. To prove this, put a drop of oil on a *dry* calf skin, and in less than four weeks the spot on which the oil fell will be perfectly charred.

Try another process instead. Wash the harness, and when about half dry, while yet moist, give it a good coat of neats-foot oil and tallow, of the consistency of soft butter, applied cold. Don't bring it near the fire, nor yet hang it up in the sun, but under cover. There let it hang forty-eight hours, after which rub it off well with a woolen cloth. A little care in this matter will prove economical in the end, since it will render the harness much more durable.

SCIENTIFIC ITEMS.

THE best cement for uniting surfaces of leather together, is a strong solution of isinglass. A cement composed of dissolved india-rubber and lac-varnish is also very adhesive.

EVERY pound of cochineal contains seventy thousand insects boiled to death.

EXPLANATION OF STITCHING PLATE I.

Drawn from the designs of various Correspondents.

Nos. 1 and 6, are designs in half figures for the central ornaments of buggy-boots.

Nos. 2, 3, and 4, are intended as designs for the corners of buggy-boots and dashes.

No. 5 is designed to ornament a bow-cap.

COACH-MAKERS' MATERIALS AND PLATING.

AMONG the advertisements with which this Magazine is favored, will be found those of Messrs. Cary & Young, of No. 1, Mechanic Street, Newark, New Jersey, and 105 Houston Street (near the Bowery), New York City. The establishment at Newark has been long and favorably known; the one in this city was started as a branch of it, early in the spring of the present year. A partner superintends the business at each place in person. These gentlemen being known to us personally, we have confidence in their integrity, and would cheerfully recommend them to the attention of our friends engaged in the manufacture of carriages, in city or country. Those in the upper part of the city, especially, will promote their own interests by giving this firm a call. They will find their plating faithfully done, and all goods sold such as represented, and on reasonable terms—and what is of equal importance, gentlemen with whom it is pleasant to do business.

The New York Coach-Maker's Magazine.

JULY 2, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

RENEW YOUR SUBSCRIPTIONS.—*Our present subscribers will please bear in mind that our rule is to stop the Magazine when the year expires, unless they renew by sending us the payment* IN ADVANCE. *To secure a complete series, therefore, our friends will see the necessity of being prompt, for we intend to regulate our edition of the* THIRD VOLUME *as near the wants of the craft as is possible. Southern, Western, and Canadian money, or post-office stamps, will be received at par. Subscribers in the British Provinces must remit twenty-five cents extra, to prepay postage for the year.*

CAUTION.—*The great popularity of this Magazine, has led some unprincipled individuals to speculate in obtaining subscriptions without authority. The Publisher therefore gives notice that no receipt will be considered binding unless it has attached to it an engraved facsimile of his autograph. In all cases, see that agents have a good supply of the Mag., and can produce a certificate of their honesty, entirely in the Publisher's handwriting. Our friends will confer a favor if they will give us early notice of suspected impostors.*

AGENCY—TO COACH-MAKERS.—*The publisher of this Magazine offers his services to fill orders for any article his friends may want, to be found in the New York Market,* FREE OF CHARGE *where the individual is a subscriber. None but orders inclosing the cash are invited. Letters of inquiry, &c.,* MUST *contain two red stamps.*

AN AGENT'S LICENSE REVOKED.—*A person calling himself J. C. Brain, was some time ago introduced to us, and given an Agency on the Magazine; it was revoked on the 1st of March, and he is no longer an Agent, having broken his contract.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Name-plates furnished to order, of different patterns, for from* $14 *to* $20 *per hundred, at this office, or sent according to directions, by express, payable on delivery; to which express charge must be added.*

☞ *Mr.* JOHN HEWLETT, *of Toronto, is the only agent we have in Canada West.*

"J. R., of N. H."—You do not seem to understand the matter. When a parcel is sent by express, of course you will pay for the delivery of it; but then, if there is a bill with it to be collected, there is an additional charge for that service. Now, should you send the money with your order in a letter, you will save *that* expense, which, if not done, must be added in our bill.

"H. & B., of H., Nova Scotia."—The Magazines, as ordered, were mailed 14th of May inst.

"G. C. & M. & Co., of S. C."—Were we to "put in some plain, neat, cheap carriage cuts, such as are used in country towns," the "multitude" would be down upon us with the cry that we were behind the age. Our idea of what a Magazine should be is, that it should *lead* the "multitude," and not let them lead the Magazine. We do our best to please; what can we do more?

"T. & S. D. C., of Mass."—Charts ordered were sent as directed, by express.

"C. L. K., of Mich."—Thank you for your compliment, and trust we shall continue to receive your approbation.

"W. H. S., of Va."—The bound volume ordered was forwarded by mail on the 18th of May inst.

"R. M., of O."—You will find the information desired on page 37 of the present number.

"T. S., of Va."—Either volume bound is furnished for $3 50.

A COCKNEY "BRANCH" ON AMERICAN CARRIAGES.

OUR interesting cotemporary, "under the immediate patronage of H. R. Highness the Prince Consort," seems to have taken our playful and argumentive review of his criticism of American carriages, in high dudgeon, judging from an article in his last number—now some two months old, *just received in this country*—which evinces that *the physic* we administered to him has operated very powerfully in the right direction. Instead, however, of clearing his brain and fitting him for properly controverting our mechanical theories in person, the mechanical conductor of *that* scientific journal, appears to have left the defense of the insulted British lion to an exasperated "lackey," whose swagger and bustle constitute the *sole* argument to be found in his answer. This is a new dodge in editorial tactics, which, for the credit of the profession, we trust will not find imitators beyond the sound of Bow-bells.

Shielding himself behind "A branch (*sapling*) of the British oak," our "*courteous*" antagonist "draws his bow at a venture, *the* Editor the meanwhile looking on, and sympathizing as he exclaims, "The Editor begs to state that he cannot be held responsible for the opinions herein expressed;" while his man Friday, having attacked us, deprives us of our "ideas" and "coach-maker's work," without exhibiting the least pity. The evident *weakness* of the entire article in question, and the irresponsible shape in which *this* "branch" writer meets the testimonies of *our* witnesses, summoned from *his* own country, relieves us of any obligation to answer his voluntary "ideas," and therefore we shall dismiss the subject with a very few remarks.

The prominent *idea* in our cotemporary is, that the fore and hind wheels of carriages should differ in size as much as possible in order to preserve "a *quiet* good taste," which we interpret to mean—should it possibly mean anything at all—put every impediment in the way of vehicular motion, possible; otherwise you will be doing violence to old conventional rules, since "the English ladies won't climb over front wheels 3 feet 8 inches, or submit to be bespattered with mud for an idea;" and our horses—patient creatures—are better able to *draw* than our ladies are to *climb;* and besides, it adds to the peoples' "comfort." But "they manage these things better in France," as will be seen from an "idea" translated from the *Mercuré Universel* in another part of this Journal. We commend this "Branch of the British Oak" and his confreres to the attention of the Royal Humane Society, as suitable subjects of punishment for cruelty to animals.

There is one "idea" we desire to call the attention of our critic to, for an explanation. How does it happen that when an Englishman imports, with himself, a *quiet, good,* and *tasty* carriage into this country, he never uses it

on his arrival, but in "*quiet*, good taste" sends it to an auction, where he suffers it to be "sacrificed" at less than half the price of its original cost, to favor the speculative "ideas" of some adventurous merchant in search of ballast for his vessel bound on a trading voyage to Buenos Ayres and a market, or some other country where civilization has made but little progress. An European's "ideas" applied to carriages do great violence to the sentiment of Horace: "*Coelum non animum mutant, qui trans mare currunt.*" When we receive a satisfactory answer to our former article, and a reason for this strange conduct on the part of our trans-atlantic neighbors who come to reside among us, we may have something more to say regarding this matter.

OUR COPYRIGHT.

Ever since we began the publication of this work we have been wronged by the petty larcenies (to give it a no harsher designation), of a certain class of our cotemporaries, until the outrage has become so alarming that we have determined to stand it no longer. To protect ourselves, we shall hereafter secure the copyright on each monthly part, instead of yearly as heretofore, and should we find any one copying our engravings without our permission first had, we shall visit them with the severities of the law in such cases made and provided. Among this class, we would especially notice a New-York carriage-maker and a Buffalo patentee. To those editors who will give us the credit due to this Journal, when they extract an article, we cheerfully concede the privilege, and we will not take any advantage of the legal security the law has placed in our hands, in such cases; but, should they follow in the dishonorable footsteps of some of the journals we could name, they will find they have commenced a game in which two parties can play. The code of morals among a certain class of individuals is of such a *loose* character, that while they would scout the idea of picking a man's pocket, they can without remorse rob him of his brain-labor, and still call themselves honest men. It is this class of *honest men* we intend hereafter to call to an account for their *mis*-deeds. *Verbum sap.* &c.

BINDING THE MAGAZINE.

Having prepared appropriate designs for the covers of this Magazine, we are ready to bind the same in muslin, gilt, for 75 cents the volume; in Turkey morocco, with gilt edges, $3. To those who would avail themselves of the benefit of our designs, covers, which any book-binder can put your numbers in, will be supplied at the office for 44 cents each; by mail, 55 cents, which includes postage, on receipt of the amount in stamps. Where six or more volumes can be sent to us by express (with authority for the Company to pay our bill), the expense of transportation, borne proportionally by each, would amount to but a trifle, and the volumes would be promptly bound and returned by the same Company, in about two weeks. For such service we make no charges beyond the 75 cents per volume for binding, except in cases where we are called upon to settle with the express company from our own pockets. The two volumes already published and bound, which we sell for $6 50 the set, in muslin, gilt (when sent by mail, 96 cents additional), with the appropriate figures of carriages in gold, will make a valuable addition to the carriage-maker's library, and furnish a body of scientific matter on coach-making which can be found nowhere else, and will be worth to him ten times the cost. Among the articles will be found: Drafting carriages by scale; construction of carriage bodies with diagrams; numerous articles on paint and painting; blacksmithing; trimming, &c., all copiously illustrated and intelligibly explained. Send and get the work while it may be had, and save yourself from after regrets.

INTERESTING TO CONTRIBUTORS.

With the determination and end in view of rendering this work as useful to the coach-maker as it is possible, we offer to send the Magazine to any one who will send us an original article of four or more pages, letter size, monthly, to be written *only* on one side of the sheet, and treat of such subjects as will be appropriate to our pages, either literary or mechanical. Should it be the latter, it will be the more acceptable, and if not quite as smoothly written as is desirable, yet, *should the ideas be there*, it will be properly prepared and credited to the contributor. Almost any one can write a letter; and to such, our "Letter Box" presents a fine opportunity for spreading useful knowledge before the craft. Who is disposed to "ventilate his ideas" in response to this invitation?

BACK NUMBERS.

Letters making inquiries if we can supply the back numbers of this Magazine are constantly being received at this office. To obviate such necessity, we are happy to say that they may still be had in sets for the volumes, or in one or more numbers, to supply those missing, when our friends are disposed to have their volumes bound. All change for the same can be sent in stamps, and all orders by mail must be accompanied with the cash, to secure attention.

Sleigh for France.—We saw the other day, at the Repository of John R. Lawrence, Esq., in Broadway, a beautiful sleigh, manufactured by our friend J. T. Merritt, of Kingston, N. Y., and designed for a gentleman in France. It is what is called the pony sleigh, and the outlines are very fine, the runners and knees being ironed in a manner to make it durable, which in too many instances is a sad defect in American sleighs. The body is painted

dark claret, set off with black in some parts, and striped in white and gold; under part Swedish vermilion, and trimmed with blue coteline, with seat and dash-rails plated and painted in spots, the *tout ensemble* of the entire job being very creditable to the manufacturer.

The Coach-maker's Letter-box.

LETTER FROM INDIANA.

SUGAR BRANCH, IND., April 17, 1860.

MR. EDITOR:—*Dear Sir*, A considerable length of time has passed since I last wrote you. When I take up my pen to write (or scribble, as I can't write), for your worthy Magazine, I feel my incompetency to perform the task which lays before me; yet with a willing heart and a ready hand, I shall proceed to place before your readers something more about carriage-making as formerly practiced here. In the September number I promised to tell you about the difference between city painting and the painting formerly done here. In the first place, I will give you a schedule of the kit employed to do a job of painting. In the second place, I will give you the notions that people formerly had of carriage-making; and thirdly, a jour painter's tramp through this country selling receipts; and fourthly, the result of the receipts.

In the first place, the tools employed in a shop for painting purposes, consisted of a paint-stone made out of slate; not more than four brushes were to be seen in any shop; one keg of lead, five pounds of red lead, one paper of lampblack, one gallon jug for linseed oil, one half-gallon jug for varnish; and two bottles, each holding a pint, were kept for turpentine and Japan; a small, narrow firmer-chisel was substituted for a putty-knife. These articles were kept on a shelf in the corner of the shop, or else on the end of the work-bench.

Secondly, twelve years ago such a thing as a carriage-painter was not known to (I might say) one man out of every one hundred in our country; and we find a great many people yet who think that one man makes all parts of a carriage, from the wood-work to the trimming. The reason for this is, they have seen men working at all the different branches of the business at different times, therefore they think that when a man is said to be a carriage workman that he can do any part he chooses. Mechanics held the idea that to paint a carriage real nice and smooth, was a great secret, and that but very few men in this country knew anything of the process whatever; and, in fact, there was none in these parts that knew anything about it.

Thirdly, a carriage-painter once came into our country for the purpose of working for a young man whom he had been acquainted with in Louisville, Ky., and for the purpose of selling this young man some receipts for painting; but after working for him a short time, they fell out, and he refused to teach the young man anything about painting whatever. His fame soon spread abroad throughout the country, and his presence created as great an excitement and wonder as that of Cortes did when he entered Mexico. Mechanics of all kinds were greatly amazed at his skill as a workman, and supposed that he was really none other than Mike. He sold some receipts to an editor of a county newspaper. He also sold some receipts to, and painted some for, an old wagon-maker who lived some ten miles distant in the country, for which he received ten dollars. He next did a small job at house painting; then got on a "big drunk" and left the country, and the last news we had of him was, he died with the cholera.

Fourthly, we will now see the result of receipt-selling in this part of the country. We will start first with the editor, who we suppose knows everything, especially all about carriage-painting, as he has procured so many receipts. The editor sells the receipts to a wagon-maker, and he sells a copy to another, and he to another, and by this time the receipts have been changed so much that the "father of it would not now know his own child;" hence the celebrated Louisville painting is voted a bore by this party.

Secondly, we will now follow the old wagon-maker and see whether he has been benefited or not by purchasing receipts. We learned that the Louisville painter stayed several days with the old wagon-maker, during which time he made a potful of drier, painted a job or two, giving all the necessary instructions as to the manner of proceeding with a job. The old wagon-maker had five boys, the oldest son a married man, who was a partner in the shop; the rest of the boys were employed in working on the farm, with the exception of the third son, who was kept in the shop a part of the time. The reason of the third son being put to the trade in place of the second, was this: It was necessary to have a boy to paint the wagons and buggies, turn the grindstone, shave spokes, saw out felloes, and do such other work as a boy can perform about a shop. Another reason was, the second son disliked the trade so much that he would not work in the shop at all; and another reason was, the third son was a sickly, puny boy, and was not able to labor on a farm. About this time the old gentleman quit the shop, and the puny boy quit the farm. The oldest son became boss of the shop, and sold a great many jobs on the ground of being able to paint in Louisville style. We will now notice the qualifications of the boys as regards painting a job, and we can do it no better than to give you their manner of working. The oldest son did the most of the wood-work and the trimming, assisted the smith in some of his most particular work—such as letting in skeins, setting axle-arms, making top-props, and a great many other little things too tedious to mention. The younger boy does all the painting, works at wood-work part of the time, and helps the blacksmith to make and set all the tire; goes to school in the winter, and, like all boys, he has got an awful hankering after calico, and last, though not least, he is *not* sharper than a two-edged sword. Now, I leave the reader to judge whether or not they are capable of executing anything like a decent job of carriage-work.

A buggy is brought to the shop from a great distance for the purpose of being repainted, as this is the only place this side of Louisville, where painting is done as it should be. The boys are out of drier, and, that is not all, they are out of the ingredients necessary to make it of; so the next morning the old gentleman goes to a town ten miles distant, that being the nearest place where the articles can be obtained, and procures the drugs required to compound the great secret lately learned of the Louisville painter. Now, the next thing is to make the dryer. An old pot, with a big hole in the side, is procured to boil it in, as the women would not let them have a stove-pot again, for when that Louisville painter made that drier

when he was here, it took much hard scraping and washing to get it clean. In order to prevent the oil from running out at the hole, the pot was tilted one side by means of a large stone. The drier always was made out of doors, as the smell was too bad to have in the house or shop. The pot being ready, the oil is poured into it, and a fire is started under the pot which soon brings the oil to a simmer. The drugs are then added, and the contents kept well stirred for some time, everything being done according to the directions given by the Louisville painter. But the boy begins to think that two hours is a long time for boiling a potful of drier, and as he adds a little more fuel in order to hurry it along, he congratulates himself on the progress he has discovered in the art of making drier; but all at once, like a flash of powder, the whole potful of drier is on fire. Old pieces of oil cloth, old carpet, and old rags are brought in abundance, and thrown over the top of the pot in order to smother the fire, but in vain, for the big hole in the side of the pot admitted the air, and the cloths soon caught fire and burned up. It was not long after it caught fire until all that was left in the pot were the drugs, dirt, and ashes of the old rags consumed in endeavoring to put out the fire. The way the oldest brother gave the younger one "fits" for being so careless and not stirring the compound better, and for making such an "all-fired" hot fire under the pot, was a caution. The boy says that it was the fault of the pot, and another thing, he did not know that the stuff would burn so easy. The old gentleman declared there was no use of making a fuss about it, as the fire was too hot for a bad pot, and betwixt the two laid the mischief; but the worst of it was, that the buggy above spoken of was to be done against the next Saturday, and it now being Thursday, would make a sad disappointment.

I have written enough for this time, so good night, gentle reader, and may your slumbers be sound and your dreams joyous, is the wish of your humble writer.

Yours, respectfully,

George Tinker.

LETTER FROM ENGLAND.

Derby, Eng., April 12th, 1860.

E. M. Stratton, Esq.:—Sir, We are much obliged by the receipt of your favor of the 19th of March, inclosing one from Mr. E—— E——, and are pleased by your politeness in reference to the introduction of some remarks upon our manufactory, in the New York Coach-maker's Magazine.

* * * * We employ with our branch establishments in Litchfield and London, upwards of three hundred hands. We have several men who have been in our employment from forty to sixty years, and a very great number who have been more than thirty years with us. It is some satisfaction for us to learn that there are people who appreciate the trouble and pains we take to make those employed by us comfortable and happy; and through the instrumentality of our senior partner, an excellent institution for the benefit of the working-men of this establishment, and other operatives in this town has been established, called the Working-men's Association, where is provided all useful and scientific literature, and the newspapers and periodicals of the day; and lectures are frequently given by friends of the promoters of the institution; also, a penny bank for receiving weekly deposits from the poor, which may be drawn out when necessity compels, or circumstances require it.

If you have the premises engraved on wood, we should like you to send us one hundred proofs on sheets for distribution, with the letter press. We have commenced taking in your Journal, and purpose continuing it, as we believe from what we have read, that it contains much valuable information that is useful to the coach-making trade on this side of the water. The wood-cuts in last year's volume, which we have also purchased, are very amusing. * * * We have been honored with the Royal patronage for years, and Her Majesty, the Queen, The Prince Consort, and Prince of Wales, are constantly employing us to build carriages for them. The Queen Dowager was also a kind patron of the establishment. We now leave the matter entirely in your hands, and have only to remark that our motto is this: "What is worth doing at all, is worth doing *well*." So we shall hope to see in your publication what will be satisfactory to us, as well as creditable to yourself.

We remain, Sir, your obedient servants,

Herbert & Arthur Holmes.

[The engraving alluded to will be given in our Magazine for August, and will be a correct copy of the drawing sent to us from England. The Messrs. Holmes will please accept our thanks for their kindness in complying with our wishes, and excuse us in the liberty we have taken with their letter, since it contains facts, which, in connection with our correspondent's description of their establishment, will be read with much interest, especially in America.—Ed.]

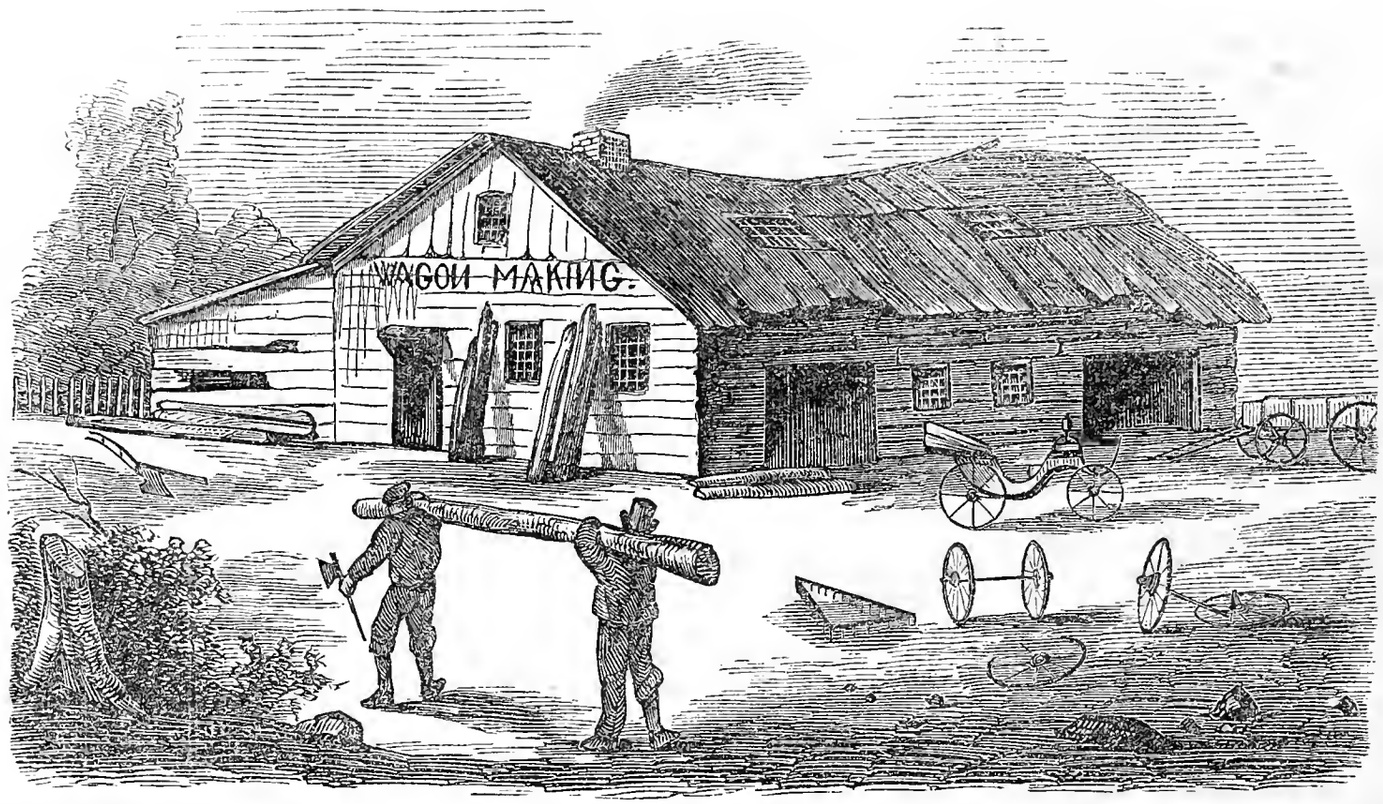
LETTER FROM MISSOURI.

Kansas City, May 15, 1860.

Mr. E. M. Stratton:—*Sir*, As my subscription is about out, I write to have it renewed, although I have to go it alone. I do not see how I could well do without your Magazine, and I am bound to have it were it to cost ten dollars per annum, for it would certainly pay at that. I admire the style and taste with which it is got up, together with its moral tone, making it a welcome visitor.

We have been imposed upon so much with mean varnish in the West, that I think of getting it in New York. Please send me the prices of English and American varnishes. * * * * Our country is new for carriage work. The farmers have not the pride in that line that they have in older places; but we have a flourishing little place, and occasionally we have a call for something neat. I work one set of hands when I can get them; but there is a difficulty we labor under here in the West—hands are generally scarce, or inferior.

We are here on the border, 2½ miles from Kansas Territory. There is more horse-back riding done here than in any other place I have ever seen. It is the general mode of conveyance. There are two other towns in this county—Westport and Independence. There is no carriage-work done except in the latter, and this place. We have two shops here working about the same number of hands in each. I tried to get the other carriage-maker and his hands to subscribe for your Magazine last year, but could not do it; they had no use for it; in other



The Shop where Carriage-making is understood without reading Magazines!—Our Agent is supposed to have made a professional visit to the above *inviting* establishment, where he is very coolly told by the proprietor "Mister! we don't have no time to read; I know more'n your books can tell us about our trade." It will readily be seen from the style of his carriages and the appearance of things generally, that the fellow's stock as well as himself are as green as—grass, and in a fair way to remain so.

words, they knew it all; but I must confess I do not know enough, but there is still room to learn, especially in our business. But I have wandered from my subject. * * * Pardon my scroll and the length of it.

Yours, respectfully, Wm. U. Wiley.

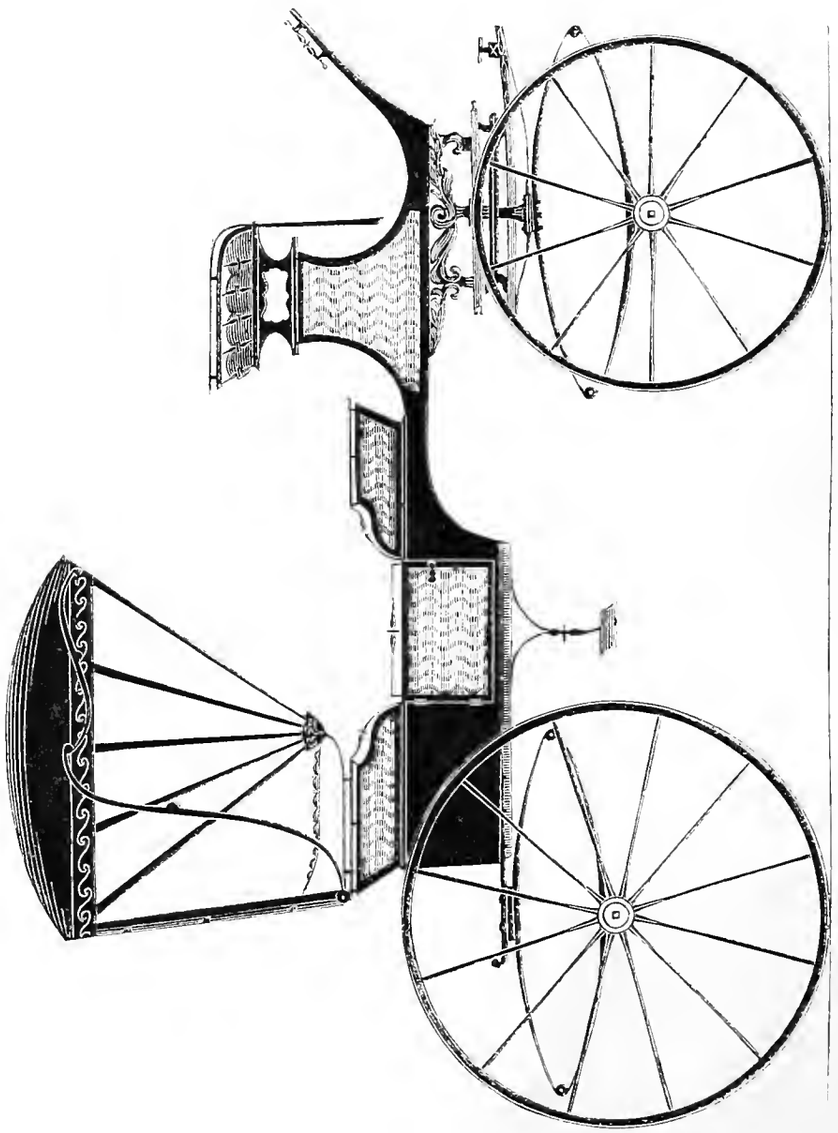
LITERARY NOTICES.

Books.—*Our Farm of Four Acres and the Money we Made by it*, is a reprint from the twelfth London edition, and published by Saxton, Barker & Co., with an Introduction by the editor of the *Horticulturist*. This is a very interesting book for the Farmer's Library, and we think well calculated for being popular in his home circle. We append a list of its contents, from which our readers will get an idea of the character of the work:—Where shall we Live; Our first Difficulty; Our second Cow; How to make Butter; What we made by our Cows; Our Pigs; Our Poultry; Our Losses; Our Pigeons; How we cured our Hams; Our Bread; Our Kitchen Garden; The Money we Made; The next Six Months; Our Pony; Conclusion.

In the *Yale Agricultural Lectures*, by S. Alcott, published as above, the tillers of the soil will find a vast amount of practical information, which they will look for in vain elsewhere. Every Farmer should have this work, because it gives the personal experience of many men on different subjects, connected with his occupation, and we feel sure that even the mechanic may read it with profit.

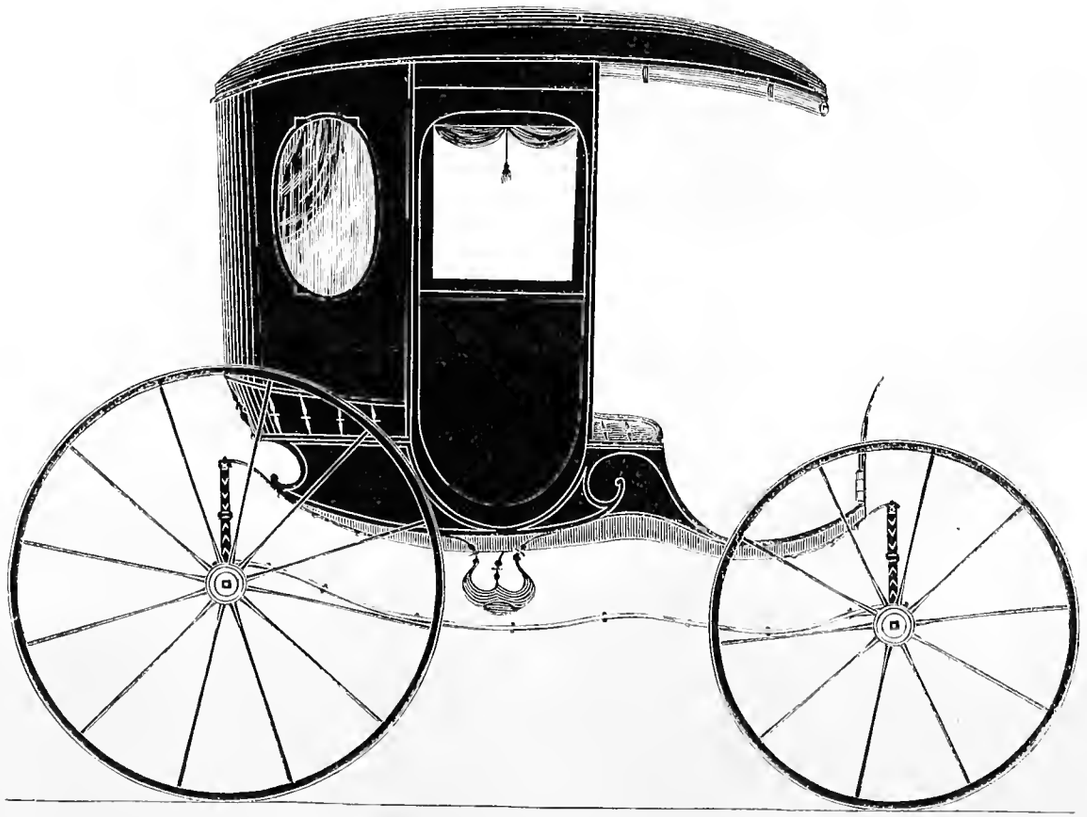
Magazines, &c.—Our Parisian cotemporary, devoted to the same object as our own Magazine—*The Mercure Universel*—with and since the February number, comes to us regularly, and in a much improved form—that of a royal quarto—with the impress of progress in its pages. The Armorial and Heraldic figures, a new feature in this work, will prove useful to the painter in combining initials for the panels of carriages. It is furnished to American subscribers at $5 a year.

The Artisan, devoted to Science, Art, Discovery, Invention, &c., is published by the American Patent Company, Cincinnati, Ohio, every Saturday, at $1 50 per annum. The numbers which have reached us exhibit that taste and talent which should recommend its introduction into the workshop of every mechanic in the Union. This is the only work, with which we are acquainted, that gives a full list of inventions patented in England.



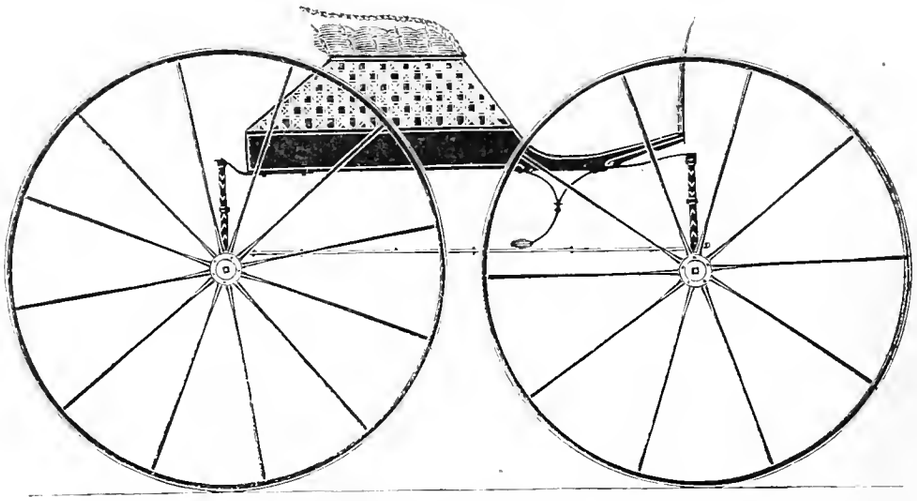
QUIMBY BRETT.—$\frac{1}{2}$ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 50.



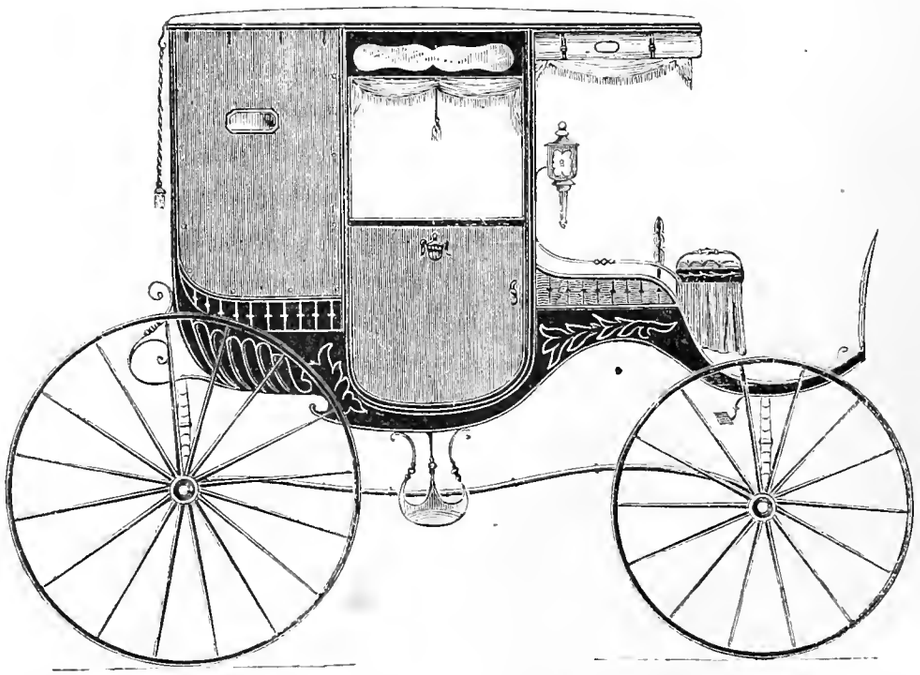
AMESBURY ROCKAWAY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 50.



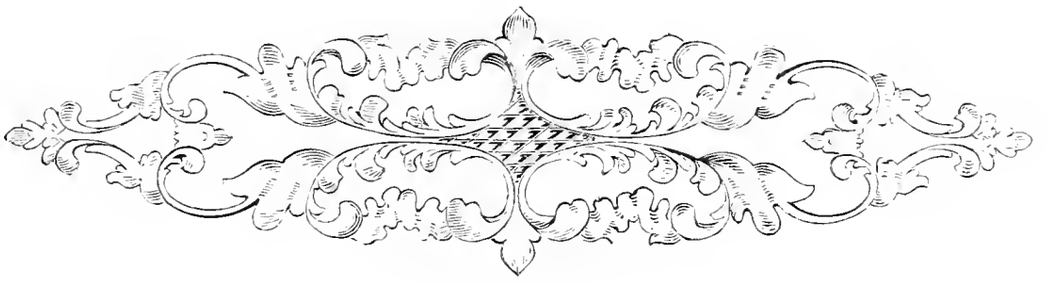
BRACKET-FRONT BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 50.



ROCKAWAY, WITH FLOWERS' PATENT SEAT.

Explained on page 50.



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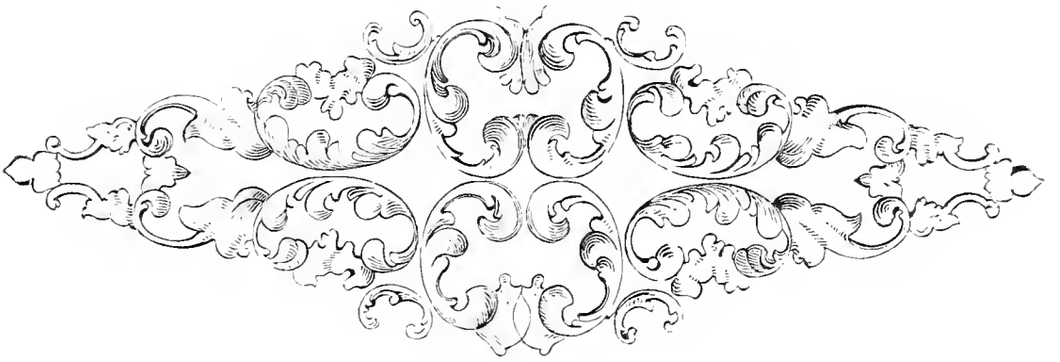

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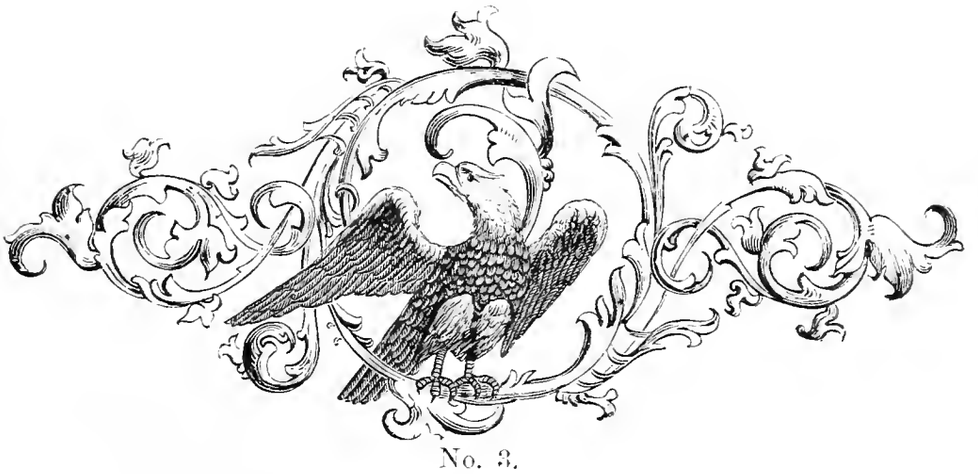


No. 3.

ORIGINAL ORNAMENTAL SCROLLS.

Engraved expressly for the New York Coach-makers' Magazine.—*Explained on page 54.*

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, AUGUST, 1860. No. 3.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACHMAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

II.

Greenfield is one of those lovely inland towns for which the older settled parts of Ohio are noted. It is situated on Paint Creek, a clear, rapid stream, and one of the largest tributaries of the Sciota. The country around it possesses great historical interest; for it was here that many a nameless battle was fought years ago, when the red man engaged in the great struggle with the pale face for the mastery of the soil. Almost every hill and vale, every spring and stream, has its legend treasured up in the memory of the old pioneers; who, like the heroes of the Revolution, are fast dwindling away,—sinking to rest beneath the rich soil they helped to conquer. These brave old men have never had justice done them. Beneath their rough exteriors beat as noble hearts as the world has ever seen. They were strictly honest in their dealings, affectionate in their love, and fearless in the hour of danger. It will not be until the last one is gone, that the western people will take that interest in their deeds that the subject demands,—deeds that form the foundation of the prosperity and wealth of the great West. The history of the world presents no period when progress has taken more rapid strides than here for the last half-century: then the undisputed home of savage men and scarcely more savage beasts, prowling through the dense forests in search of prey; now the most prosperous portion of our land, where rich harvests smile in the autumn sunlight, and thriving towns send forth unceasing sounds of industry. The sharp whistle of the iron horse, as he plunges madly from place to place; the hum of revolving wheels in the great factory; and the clear ring of the anvil in yonder dingy shop,—all tell us that we live in a different era of the world's history than when the flat-boat floated with the current down "*La belle rivièr*," and the pack-horse carried the necessities of life to the scattered settlements of the backwoods.

Such were my reflections as I walked from the depot to the hotel, and noticed the many evidences of civilization about me. A church reared its tapering spire up towards the blue sky, while near it, a large, stone edifice was seen, where the youth of the village were instructed in the mysterious principles of orthography, mathematics, grammar, moral and philosophical ethics, besides a slight knowledge of the classics.

I found the boss to be a young, sociable fellow; while my "brother chips" received me with marks of respect and kindness.

My first job was a phaeton, and as I shoved my jack-plane over the broad, poplar panels, I felt as though "Richard was himself again." When the body was finished the boss came in, and after surveying it for a moment, asked how much it was worth? "Sixteen dollars," I replied. Taking out that amount, he laid it on the bench. Surely, thought I, the man is crazy, else this is a very polite hint for me to quit, and I looked at him in surprise.

"As money is plenty with us just now," said he, noticing my looks, "we don't keep any books, but pay the cash as soon as a job is done. You can make the carriage part for this job if you will;" and he left the shop.

Folding the money up, and placing it in my pocket, I thought, "Well, this is good luck for once, at least;" and I was so well pleased with my situation that I about concluded to stay for an indefinite period, if all things went smoothly.

One day, as the hands were all gathered about my bench, testing the good qualities of some peaches, we got talking about eastern work; and one of the body-makers, whom we will call Bill, told a laughable incident, that pleased me much at the time.

"Two years ago," said he, "Jim Harris, having served his time in this shop, concluded he would 'tramp' and see a little of the world. Packing up the few tools he possessed, he started out, and soon after we learned that he was in Circleville, a town some thirty miles east of this, and twenty north, and that he had a good job; therefore we gave up all expectations of his returning. About three weeks afterward, however, we were surprised to see him enter the shop, looking rather the worse for wear.

Gathering around, we inundated him with questions as to the work he had done, the kind of shop he had worked in, and so on, all of which he answered; when one of the boys asked him, what was the cause of his quitting? Straightening himself up to his fullest height, and with a serious face, he said, slowly, 'Ah, boys! you ought to go East; just go East like *I've been*, and you'd find tools there that you wouldn't know how to work with.' A shout of laughter followed, much to the discomfiture of poor Jim, who never heard the last of *going* East as long as he staid in Greenfield."

A month or so after I went to work, a boy came to learn his trade in the shop. He was a tall, verdant specimen of humanity, fresh from the Sunfish hills, where, as we have heard, daylight doesn't get down in the deepest valleys until ten o'clock of a morning.

Ohio, above all other States, is the greatest place to play tricks on "cubs," as the youngest apprentices are called, that we have seen. After this boy,—nicknamed "Skeezicks," had been there a month or so, the hands concluded it was time for him to pass through the ordeal, and as he was not well liked, they determined to give him their *best*, and endeavor to get clear of him. As I was a stranger, and being opposed from principle to this species of amusement, I did not take any part in it, but learned the circumstances afterward. First, two of the boys in the shop proposed to go out "baiting," to which he readily agreed. When the appointed night arrived, the trio sallied forth, equipped with butter, crackers, pepper and salt. Proceeding a mile from town, they entered a wealthy farmer's barnyard, and purloined one of the fattest gobblers in the flock, and after wringing off his neck to keep him from alarming the neighborhood, they went as speedily as possible to a creek a mile farther. Here they dressed the game, and after borrowing a few potatoes from a neighboring field, they built a rousing fire on the bank of the creek and commenced roasting their plunder. Skeezicks was very officious on the occasion, particularly in replenishing the fire with rails from an adjoining fence. In the meantime three of the jours who had arrived there sometime previous and concealed themselves, were watching the state of affairs, and just as the hero of the expedition was staggering up to the fire under the weight of an enormous rail, they rushed forth, and one cried out, "Here they are! here they are!"

"Who, when, which, what's that?" cried Skeezicks, in trembling accents, as he let the rail fall by the fire.

"It's some one after us, I guess," replied one of the boys with well-feigned fear. "Yes, here they come, run boys, run!"

"Here they are, stealing our fence rails," cried the pursuer. "Here, Watch! Watch!" and the three boys broke "like quarter horses," to use a jockey phrase, Skeezicks taking the lead. Following him some distance, the two boys quietly fell back, and then returned to the creek, where they found the jours; and sitting down around the fire, they made an excellent meal. Shortly after Bill reached home, Skeezicks called, and requested to see him for a moment privately. Going out to the gate the boy told the story of the night's adventures, declaring that some one pursued him even in town, swearing they would have him arrested in the morning for stealing fence-rails; while he greatly feared the other boys were captured, as he had seen nothing of them since they left the creek. "Now, I tell you what it is, Bill," he added, "I'm goin' right off home, and I want you to tell the boss all about it." Bill tried to console him, and told him he had better stay; but no! the dark walls of the calaboose loomed up dismally before his eyes; and starting off on a dog-trot he made "tracks" for the Sunfish hills.

These incidents, which I have thrown in for variety, will show that the craft in Ohio love a joke as well as their eastern brethren.

In the meantime I was getting on finely. The timber was of the best quality. My shop-mates were clever, and, above all, money was plenty. I always was a poor hand to go in society. While others would get acquainted with nearly every person in a village no larger than Greenfield, I would know none but those among whom I was necessarily thrown; consequently the long, September evenings, with cloudless skies and a full moon, were very lonesome. I usually passed them alone in my room, by reading, or writing to my old friends in the East. If I could not content myself in this way, I would stroll out.

Just below the village, on the high bank of the creek, was a heap of logs fast going to decay, and surrounded by a dense thicket of rank weeds and thorny briars. A single glance at the spot told plainly enough that a cabin had stood there in early times, but it had long since fallen or been torn down. Similar ruins are often found in the old fields, and they all possess a peculiar kind of interest to one who loves to meditate over the relics of a past age; but this one possessed more than ordinary interest, for in that rough cabin in the year 1804, Otway Curry, one of the truest poets the great West has ever produced, was born. Reared in the wilderness, on the borders of civilization, without the advantage of even common schools wherein to learn the first rudiments of an English education, this child of nature struggled on, rising step by step, first as a carpenter, then a lawyer, a member of the State Legislature, an editor, and a poet; his whole life was a desperate conflict with the many obstacles that impeded his progress, until in 1855 he sank to rest, singing his own sweet lines,—

"'Tis sweet to think, when struggling
The goal of life to win,
That just beyond the shores of time
The better years begin."

And that spot was my favorite resort on those calm, quiet September evenings. I would sit there for hours sometimes, listening to the Katy-dids as they chirped their evening songs all about me, and viewing the stream as it glided past, its waters sparkling in the moon-beams, or turning my eyes upward, gaze on the starry constellations, and repeat Curry's greatest and best poem, "Kingdom Come."

There is something strangely fascinating about these rough, uncouth geniuses of the backwoods. Like the unpolished diamond, the fire smoulders away down in their natures; but education must knock off the rough corners to let the light burst forth and entrance the world. There was Bascom, rough as the wildest urchin that ever played amid the great trees of his own wild forest-land, gifted with that greatest of all talents, eloquence,—the gift that rendered Demosthenes, and Cicero, and Henry immortal,—the power that roused the Athenians to arms, and our own forefathers from their lethargy,—the power that unites a thousand minds as one, with but a single object in view; but it was buried beneath an exterior so forbidding that education alone brought it forth to the

living day; and if Otway Curry had possessed such advantages, he might have been in poetry what Bascom was in theology,—among poets what Bascom was among divines. But instead, he lived with sublime poems "all written out in his soul," but few "electric flashes from heaven" were bright enough to penetrate there; he lived and died, and now how few, even where he was born, know that he ever had a being, or tuned his lyre to sing in the smiling valleys of Ohio.

As time passed on I began to enlarge the circle of my acquaintances somewhat, and I found society very pleasant and agreeable. Yet such a love had I for my books that I seldom found time to enjoy it. It was only when those *fits* of loneliness previously spoken of came over me, brooding like angels of darkness in my very soul, infusing a gloomy, wretched feeling through my mind,—it was only on such occasions that I would go out to pass a social hour, and endeavor to enliven my spirits by mixing with the gayest of the gay.

During the winter I became acquainted with a young man named Worthington. At our introduction I felt a good deal of interest in him, and ere long we became intimate friends; for he was—but let me give his portrait.

Fully six feet high; very slim and straight; thin face; high cheek-bones; large mouth; full, gray eyes; bold forehead, projecting over his face like the eaves of a house; short, bushy hair of a darkish brown color; careless in his dress; with a comical, good-natured smile ever playing about his thin, bloodless lips—and you have him.

Every locality has some peculiar "genius" who has a funny way of saying things in an original style; and he bore that relation to Greenfield and vicinity. Too good-natured to have an enemy, he was everybody's friend; too indolent to work, he was always concocting plans to "kill time;" and he usually managed to do it by calling on his female friends, with whom he was very popular. At social gatherings he was the "observed of all observers,"—the central system around which all subordinate planets revolved. Yet, as our portrait verifies, he was very homely; he knew it, and boasted of it as an honor. His popularity lay in his "faculty" of speech; he possessed that remarkable talent, which a noble poet, as you may remember, attributed to Madame de Stael, of talking herself good-looking in a given number of minutes. I always loved his society, not because I could learn much from him, but because he was always cheerful,—that kind of cheerfulness that we can compare to the sun, infusing its genial warmth in everything that comes under its influence; and then he was such a capital subject for the study of human nature.

After the winter had passed away, when the elm and maple trees looked green, and the plum blossoms fairly opened, he invited me to accompany him on a visit to his "country cousins," as he facetiously termed his lady friends, who resided in the rural districts. I gladly accepted it, for I was weary of the shop, and tired of the continual routine of labor. One fine morning he drove up to the hotel, and taking a seat by his side, we dashed off in fine style. The country over which we passed was gently rolling, with fine farms, under a high state of cultivation bordering on the road. After proceeding several miles we stopped at a large farm house; and on entering it, I was introduced successively to three rosy-cheeked girls, who welcomed us with genuine country hospitality.

I passed a happy day. It is one of the few that I love to live over again when I musingly recall the brightest moments of an unhappy life. In company with Mr. Worthington my natural diffidence left me; the restraint that acted as a flood-gate to my feelings was raised, and in a few hours I became as well acquainted with the girls as if we had known each other for months. Towards evening we all took a stroll out in the woods to gather wild flowers.

Different organs of the mind have different loves. I love the wild, mountain scenery; the yawning chasm where the smaller stream dashes through its winding passage, roaring defiance at the numerous rocks that obstruct its way, springing with desperate energy over the precipice, forming brilliant cascades as it falls, foaming and roaring like a maniac, far below; the rocky cliff towering far above, crowned with a single oak, which strikes its tough roots in the crevices like eagles' talons, mocking the lightning's shock and tempest's power; and this is a love for the grand and sublime. But still deeper is my love for these wild old forests of the West, where you will see trees of every size and shape, from the vigorous sapling to the lightning-scarred trunk of the monster oak, while the ground is strewn thick with fallen veterans in every conceivable stage of decomposition, from the tall elm torn up by the last tempest, to the moss-covered ridge that tells us a log has been there, as plainly as the old granite slab with a name rudely carved thereon, tells us that some one, once human, sleeps below. This is a love for the beautiful.

It was such an old forest that we wandered in; and after gathering a variety of flowers that peered up through and blossomed above the brown, winter-bleached leaves, we sat down on one of those moss-covered ridges, and began to twine them in bouquets. There were forget-me-nots, and wind-flowers, and golden buttercups, and spring-beauties—I love these old-fashioned names the best, because they were so called by our mothers and fathers when they rambled through the woods, half a century ago; their hearts beating as high with hope and love as ours ever can.

It was one of those calm, April evenings, with a hazy atmosphere skirting the distant hills, while the red sunlight struggled through fleecy clouds that lined the western horizon. The gray squirrels were out for their evening meal, playing in the arched boughs of the elms, and feasting on the green buds, while the robins and blue-birds were singing their merriest anthems in the sugar maple that threw its long branches over us. The girls were very talkative; and Mr. Worthington, in the height of his glory, kept us all in the best of humor by his brilliant sallies and humorous remarks. Lizzie, the youngest and fairest of the trio, after braiding her flowers in a beautiful wreath, displaying fine taste and consummate skill in the task, gave it a careless toss towards me, and said in a playful manner, "Accept the flowers with their sentiments, and remember the giver;" then, in a lower tone, slightly tinged with irony, she added, "at least until they become withered."

I picked them up and replied, "I will place the wreath in water, and embalm the deed in my heart, so that if one does wither, the other will ever remain warm and bright."

"Nonsense," exclaimed Worthington, interrupting us. It was a long while before I forgave him that breach of good manners, and at such an *interesting* time too. "Non-

sense! talk about anything warm in your heart; why it is as cold as a buttermilk cellar."

A light laugh ran round the circle at this odd comparison, which roused me slightly, and I retorted, mimicking his tone and manner of speaking. "Very true, sir, but remember that it is better to have a cool heart that only warms up beneath the bright eyes of woman, than one as false as the Egyptian guides of Cambyses, of whom we read in ancient history."

He winced slightly, and immediately changed the subject; which was easily accounted for, from the fact that he was, at that very time, paying more than ordinary attention to some three or four girls,—at least, more than mere friendship indicated in the eyes of their respective mammas.

As his remarks were principally directed to the two elder girls, I renewed my conversation with Lizzie, at the same time looking over the wreath to read its language. First came the little blue forget-me-nots, speaking in their modest way of true love, and then, as though to contradict the sentiment, a large dandelion with its golden flowers spoke of coquetry; then spring beauties and buttercups, and various wild flowers that bloom in the early spring-time at the roots of maples and elms, all twined gracefully on a twig of pine. I examined them carefully, conversing at the same time; when, buried beneath the blossoms, I found several dead leaves. At first the idea presented itself that it was merely accidental; but noticing my changed appearance, she asked, "What do you think of the sentiments?"

"They appear somewhat inconsistent," I replied; "here we have true love, coquetry, contentment, desertion, hope and ——— did you place these here purposely?" I pointed to the dead leaves, as I asked the question, and she replied in a lower tone, "Certainly, they interpret the real feelings of my heart."

"What! for one so young and happy as you should be?"

"There is a great difference sometimes in what we should be and what we are. We cannot judge a person's feelings by looks always, for you know the calmest sea may cover a fearful wreck. But you said there was inconsistency there; let us see. There is love and coquetry, hope and despair in every woman's heart. It is human to change, and we are not the same persons to-day that we were yesterday, any more than the sunshine is the same. Yesterday we may have felt sad; to-day, happy. Yesterday, the flames of true affection may have warmed our hearts, while to-day, as our feelings have changed, we may have the inclination to flirt a little. Yet I would have you remember that there is great difference between coquetting and a coquette, as I speak of it."

"I think I understand your meaning," I replied, "but give me the woman with as little of that nature as possible, more particularly if there is any love in the case. Every day some crushed heart ceases its pulsations, the first cause of which was a seeming slight, a little innocent coquetry it may be, for love is very sensitive; it may be blind to faults, but to *attention* it has the eyes of an Argus."

Our conversation was finally interrupted by Mr. Worthington proposing to return to the house, to which we all consented by gathering up our flowers, and proceeding slowly in that direction. After partaking of a social cup of tea, we took our departure, but not without a pressing invitation to call again, which we promised to do at the first favorable opportunity. Arriving home, I placed the wreath in water, where it remained fresh and fragrant for a long time; and finally, when it began to wither, I pressed it and laid it away carefully, a memento of the pleasing incidents of the day. That gaudy dandelion, and those brown, dead leaves, always caused me to shudder intuitively whenever I saw them.

(*To be continued.*)

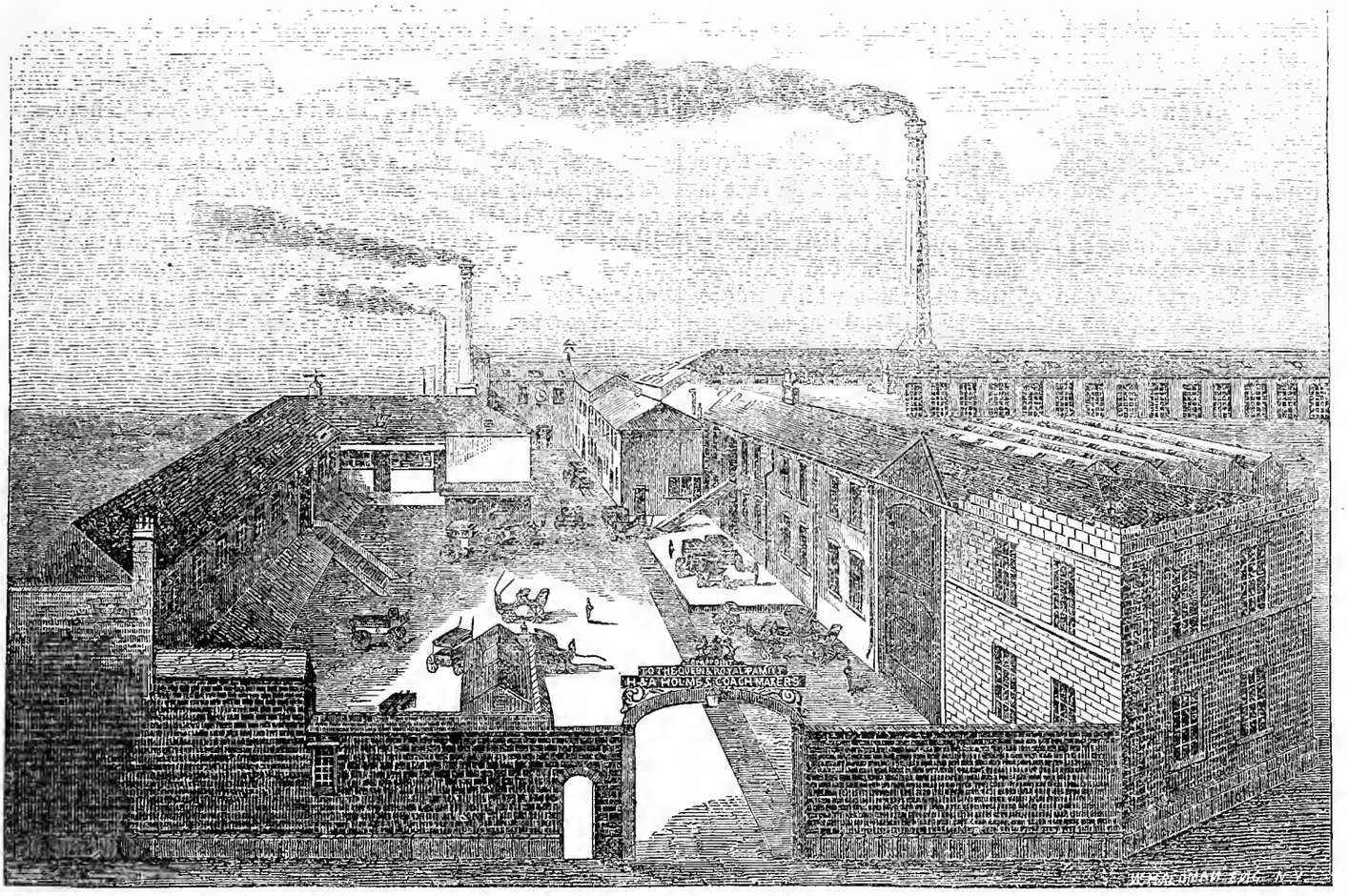
For the New York Coach-maker's Magazine.

DESCRIPTION OF MESSRS. HOLMES' CARRIAGE-MANUFACTORY, DERBY, ENGLAND.

BY. E. E., BOSTON, MASS.

IT would not be becoming any man thoroughly acquainted with a majority of Boston carriage-shops to suppose that they were a fair sample of carriage factories in other parts of this country; but it is generally admitted that it is a national characteristic of the go-ahead Yankee, to construct and manufacture every article at the lowest possible cost, without that regard to wear, stability, and durability, which is so characteristic of Mr. John Bull. This is especially true in constructing railways, bridges, public buildings, tenements, &c. &c., down to the humblest article of wearing apparel; but, if any one thing more than another, workshops and manufactories. With the latter, when new shops are to be built, or old ones enlarged, they are almost always done as though they were intended to last an indefinite period. There is not so much of that half-way work about it, which only ends in being an apology for that which is really needed. From my experience, together with all the information I have had, I am inclined to think that a majority of American carriage-shops are not fitted up with that regard to internal arrangements which conduces so much to the comfort of the workmen, and has some effect (especially as regards painting) upon the general character of the work. I had the pleasure of holding a situation at one time in what I considered a model manufactory. It was of short duration (some five or six weeks), and the few remarks I make upon the arrangements, and the perfectness of the establishment, are entirely from memory; and in the impressions received during the time in which I was upon the premises, I may be led astray in some very minute particulars; but as the factory is situated in my native town, and as I have always had, and still have, many dear and a few near friends upon the premises, the name and some of the firm and their manufactory having been as "household words" to me from childhood, I am able to speak more candidly and with more confidence than any casual observer, who may not have had the opportunity of a longer acquaintance.

The manufactory of the Messrs. H. & A. HOLMES is situated in Derby, England, a large manufacturing town of 65,000 or 70,000 inhabitants. They have a branch factory in the city of Litchfield, and a town repository in a central part of the West End of London, employing in the whole about 300 hands. The manufactory is composed of brick buildings, two stories high, and in the form of an hollow square. Presuming the reader has a little leisure time, I shall make bold to enlist his com-



VIEW OF THE MESSRS. HOLMES' CARRIAGE-MANUFACTORY, DERBY, ENGLAND.

pany, and conduct him through the various workshops to the best of my ability, from recollection. The frontage (upon the street) of the premises, is a large brick wall some fifteen feet high, in the centre of which are a pair of large sliding doors. Over them may be seen the name of the firm, surmounted with the Royal Arms of England, which are to inform you that the firm are "By Appointment" Coach-makers to the Queen and Royal Family. As you stand in the door-way and look into the spacious, well-paved yard, capable of holding more carriages than I would venture to guess at, with the chariots and calashes, broughams and coupees, standing around; the busy artisans crossing and re-crossing, every one with such a business-like gait, all seeming thoroughly to understand their business; the large and business-looking office; the clock upon the uppermost front shop, with the bell in its little cupola, and the tall, mechanical looking chimney, frowning over all,—it impresses upon the stranger the conviction that it is a well-regulated and well-conducted manufactory. We now step into the yard, turn to the right, ascend a few steps, and enter the lower show-room, which we find well filled with the choicest of vehicles; chariots with and without hammer-cloths, landaulets, landaus, broughams, barouches, and all such carriages, which none but the richest of the rich use. This room is a long, spacious apartment (at a rough guess 200 feet long by 35 feet wide), a great part of it carpeted or matted, with a profusion of scale drafts, and other ornaments, which give it more the air of a public hall, than a part of a carriage factory. We walk to the upper end—leave by a pair of double doors—re-enter the yard and come to the office, which projects out some 35 feet. The buildings from this to the farthest end are double the width of the show-room.

Upon entering the office, the first thing we notice is the superior manner in which it is fitted up; it appearing to have everything for convenience and comfort. The large, ponderous-looking ledgers, with all the minor details of a well-regulated office, are all to be found here. Upon the walls of this room, especially, there is a rich display of scale-drafts, in colors, and as perfect as though printed from copper plates. There are also medals, and other "marks of distinguished honors" the firm have received from different sources for their superior workmanship exhibited at exhibitions, both at home and abroad; and if I mistake not, letters from Royalty upon affairs connected with the business of the firm. The stranger would infer that neither money nor skill were spared in making this part of the premises as perfect and imposing as possible.

We leave the office and take the nearest door, which leads us into the carriage-making room. This is conveniently filled with benches, each bench with its busy occupant fully engaged upon his work. At the back of this room are store-rooms, and other offices for different purposes. The next room is the wheelwrights', which is large and commodious, and fitted up with all the requirements necessary for that branch of the business. From this shop there are several buildings at the back part of the premises, including another large yard, which has

another distinct entrance, where lumber is deposited as it comes from the woods, and a quantity upon hand which would take many years to use up. Upon this part of the premises is the machinery, and there are rooms variously occupied, as an engine-room, turning-shop, store-rooms for dry lumber, saw mill, and other conveniences which my memory fails to singly designate. The firm have splendid machinery, and every part of a carriage that is susceptible of being improved by the aid of steam, is so done, from the turning of hubs and spokes, to the punching out of iron washers. The upper end of the machine-shop is the extreme end of the premises, which might measure from the frontage some 125 to 150 yards.

Turning to the left from the wheeler's shop, we enter the upper front shop, which commands a view of the yard, but for what purpose it is used, I cannot now call to mind; but passing through this room and turning to the left, we come to the other side of the premises. Here is the blacksmiths' shop, which extends the entire length of the block, until you come opposite the office door, where you emerge into the yard—and the space occupied by the show-room upon the opposite side of the yard is used as an open shed upon this side, at the end of which are some small rooms used by women sewing for the trimmers. We now ascend to the second story, into the room over the shed. This was partly used as a store-room for timber, and had some few wood-workmen in it. The next room, which extends the entire length of the blacksmiths' shop, is the body-making room. This is full of workmen, and you see every style of bodies in course of construction. At the upper end of the room is the desk of the foreman of the body-shop, who has a general superintendence of the whole premises. From the body-shop, turning to the right, we pass through the stitching-room to the other side. The first two rooms are the trimming-room, and a shop used by painters to rub and prepare work for the next room. The paint-rooms are situated over the offices and carriage-making shops. They are what we might term, one large room, divided lengthwise. The inside room, or the one that fronts the yard, is used as the body-painting room; the outside one, as the carriage-room.

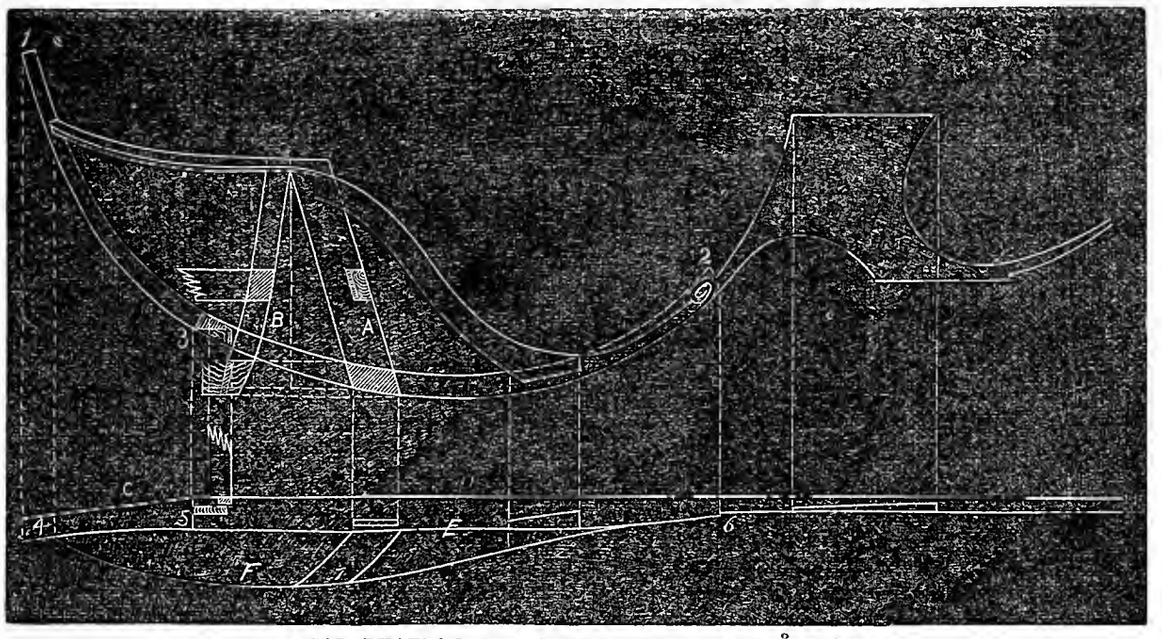
Passing through the carriage paint-room, we come to the upper show-room, which is immediately above, and the exact size of the lower show-room. At the end by which we enter, are a pair of large doors. From these doors are two large beams with tracks, or grooves in them, that go down into the yard. The work is all put together at this end of the room, and made ready for running; and when wanted, all that has to be done is to adjust the beams to the width required, wrap a chamois around the axle, make fast the rope from the windlass, and lower it down the tracks without any swinging off; and there is no jamming of varnish, no risk of ropes breaking (the strain is so small), and endangering of life and limbs. This room is filled with the same choice assortment of carriages as the lower one. We next descend a flight of stairs into the lower room, and go out by the door we came in at, having made the entire circuit of the upper and lower stories.

All these shops are fitted up with every regard to the health and comfort of the men, regardless of expense. They all go through their regular annual cleaning, and are made as comfortable as dwelling houses. The walls and ceilings of the paint-shops and show-rooms are finely plastered, as are all the ceilings of the other parts of the premises; but I cannot remember whether the walls are. All the shops are heated by steam pipes, by the sides of which large water-pipes run through the premises, with hydrants at convenient places in case of fire. There are several good clean water-closets at different parts of the premises, both up stairs and down, and by a little simple arrangement, almost every man upon the premises can see when these *necessary* apartments are engaged or at liberty, without leaving his work. Gas is carried throughout all the shops, and by its perfect adaptation in the paint-rooms, night may be made as light as day, and no inconvenience experienced by being belated occasionally; the fittings being so perfect that light can be brought to any spot desired. The walls and floor of the body-paint-room are painted every six months, and the ceiling whitened. The walls of the carriage-paint-room are painted once a year. The windows are perfectly tight, and the window-sills beveled, so that no amount of dust or dirt can remain upon them long together. The daily cleanliness of the rooms is provided for, besides which they are supplied with plenty of good screens, an article totally ignored in American carriage-shops. These are made with good wood-frames and canvass drawn tightly over them; after which a few coats of yellow-ochre is given. They are constructed after the folding clothes-horse style, so that when a body is varnished, screens are placed all around it, by which a better job is secured. It is the same in the carriage-room. When a set of wheels are varnished, they are placed two abreast by the wall, and a screen is placed over and in front of them. The carriage part is similarly provided for. Cast-iron turn-tables are provided for the body-room, having triangular legs with castors, so that the body may always be turned to the light, and work may be moved from one end of the room to the other, without any occasion to lift it. At one end of both carriage and body-room are rows of small cupboards; every journeyman and most of the elderly apprentices occupying one each. Every man has one dust-brush, one wash-leather, one sponge (which every mother would protest was too good to touch a dirty carriage with), a set of varnish brushes, and a set of striping pencils. These are for his own exclusive use, and which he jealously keeps locked up in his little cupboard. Each man takes care of his own tools, and this prevents chamois and sponges from lying round, kicking about the shop.

At one end of the shops, and in the centre of both, is a small room with an entrance from the carriage-room, with windows communicating with the body-room. This is the paint-room, fitted up with two good marble slabs; an excellent stock of the best of brushes. I don't think there is a blender for laying paint upon the premises. Here one man is wholly employed in preparing and grinding colors. A painter may work upon the premises for years and never have occasion to mix a single cup of paint. Every piece of work is numbered with stationary numbers, for stationary work. When a man is going to use paint, he gives in the number of his piece of work. His paint is all prepared in a clean cup, and suitable brushes selected. He asks for the paint or color for such a number; it is handed to him over the counter as though he was buying an article in a store. When he gets through with it, he returns it, and the brushes and paint are taken charge of again until the next time it is wanted. The advantages of this may be seen at a glance. There

is no trouble had by one man taking another's color. No yelling about "who left this stone dirty?" or "who left this brush out all night?" or "who made this black which will never dry?" There is none of this. One man is responsible for all, and so keeps all in the nicest and cleanest order.

(*To be continued.*)



CAB PHAETON AND CANT-BOARD—SCALE $\frac{3}{4}$ INCH.

ENGLISH CARRIAGE ARCHITECTURE.—NO. III.

VIEWING this series in the light of utility, the present is the most valuable diagram we have placed before the readers of this Volume of the Magazine. Being very plain and simple, it will require but a brief explanation to enable any one to thoroughly understand it.

1. Draw the dotted perpendicular lines 1 and 2 on the cant-board. These represent the extreme length of the body, proper.

2. Next, take the distance from 3 to 2, and lay this also on the cant-board.

3. Then draw a perfect sweep from 5 to 6, as shown in the drawing.

4. From 4 to 5 shows the outline of the corner pillar.

5. Next, get the turn-under of the standing pillar A, as represented on the cant-board.

6. Draw a perfect sweep from 4 to 7, showing the elbow or arm-rest line.

NOTE.—A, designates the standing pillar; B, the swept face of the standing-pillar; C, inside of corner pillar; D, the inside of the bottom-side; E, outside of bottom-side; F, the elbow-line.

This is entirely different from any diagram yet published in these pages, although it has been long practiced by American coach-makers. The "art" of working by rule has been confined to a few, however, and the *masses* will find it for the first time, here, made accessible to them.

Happy is he who limits his wants to his necessities.

For the New York Coach-maker's Magazine.

DISTANCE-TABLE FOR HANGING UP CARRIAGE-BODIES.

BY F. J. FLOWERS.

MR. EDITOR:—In the year 1855 I sent a contribution to a mechanical journal, termed, "A Rule to obtain the correct length of a Perch," but in consequence of the limited circulation of the work referred to, it is very natural to suppose that but few of your subscribers have ever seen it; in fact, some of them have requested me to offer it to you for republication. But, sir, knowing the character of the New York Coach-maker's Magazine, and that the design of its editor is to make it something more than a mere *echo*, I have refrained from troubling you with a rehash, and now offer you in its stead another article which I have prepared; and which, though very simple, and differing in principle, in the end produces the same result.

I term this a point, or distance-table, for it is used for that purpose, and may be used in other cases than that to which I am about to apply it; which is to show the position of a front axle, so that when it is angled, the wheel will strike the body at the place designed; or, in other words, show how far the spring-bar should be placed in front of the wear-iron. Now, before deciding in this question, it is necessary that we know the different parts, and also how each part of the carriage affects this point.

As we proceed we shall see that there are seven considerations involved in our experiment, namely: The width of the track, the height and dish of the wheels, the gather and set of the axles, the width of the body, and the height it stands from the ground. For the first named I have prepared a table for different widths of track, as may be seen laid down on the diagram. For the different sized wheels I have also provided, in the employment of different sized circles. The third, fourth, and fifth vary so little, worked by a mechanic, that no alteration need be made in the table. The sixth and seventh vary in every instance, so much that it is impossible to lay down in our table any rule for more than one width, and to vary from that as the case requires.

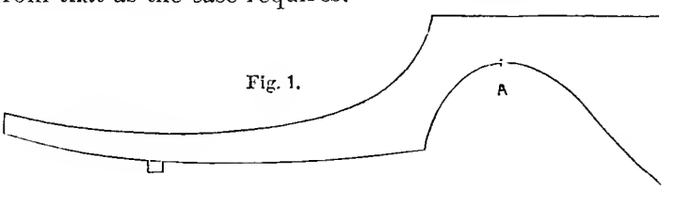
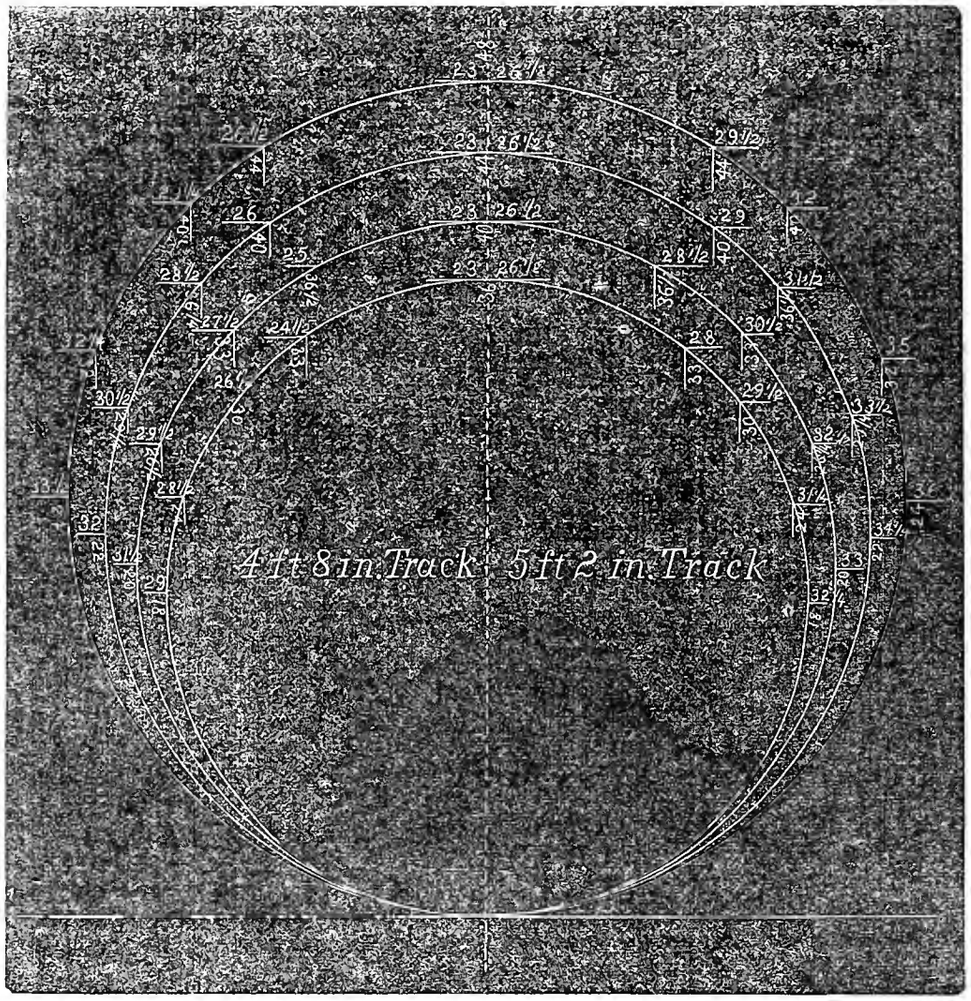


Fig. 1.



DISTANCE-TABLE FOR HANGING UP CARRIAGE-BODIES.

Figure I. represents the front portion of a body. A is designed to mark the point where the wheel strikes against the body or wear-iron. Now, as we wish to determine the place for the spring-bar, we must first ascertain the height of the wheel, and also what part of its circle will strike the iron. For our purpose we will suppose the wheel is thirty-six inches high. To ascertain at what point of its circle the wheel will strike the body, we must first know how high the wear-iron stands from the ground. This may be done by adding half the height of the wheel, the height of the spring and bar, head-block, axle-bed, fifth-wheel, and also the raise of the arch in the body above the point designed to rest upon the bar; which in this case we will suppose to be in all thirty-three inches. This having been decided, we may now consult the table, and look for the circle corresponding with the height of the wheel, designated by the figures on the center or dotted line. Now, having the track in view, we follow that circle and find that the second perpendicular line is marked 33 inches, and of the same height as the wear-iron stands from the floor. The horizontal line at that point shows that the bar must be placed 28 inches forward of the wear iron, providing the body is three feet wide, as that is the scale on which the table is drawn; but should it be wider, for every inch, deduct one quarter of an inch; if narrower, add the same. Thus, having explained one point, the others will be clearly understood.

The Home Circle.

For the N. Y. Coach-maker's Magazine.

THE SONG I HEARD.

BY ANNIE M. BEACH.

I heard a song—a glad, free song—
Just at the shut of day,
When gentle zephyrs floated down
And kissed the new-mown hay.

It was a sweet, familiar tune,
A tune of other years;
The music glided to my heart,
And filled my eyes with tears.

Yet 'twas not that the simple lay
Had ought to make me sad;
It was that I had heard it oft
When life was young and glad.

It told a half-forgotten tale
Of days forever fled:
Of friends—the friends of "long ago"—
Now sleeping with the dead.

And thus it is, some simple word,
Some song, or common flower,
Can summon from the still, dim past,
The scenes of childhood's hour—

Something that in our early home
We watched with childish care,
The pleasant memory of which
Will haunt us everywhere.

Cambria, N. Y., June, 1860.

For the New York Coach-maker's Magazine.

MOONLIGHT MEMORIES.

BY ANNIE M. BEACH.

"Moonlight evenings." Who does not love them? when the silver beams seem to float like a fairy's spell over all things, gilding night's black mantle, and gliding into the hearts of the young and gay, who go out to sing sweet songs "'neath the clear silver light of the moon." I am thinking to-night—wandering backward to the silent past, the moonlit eves of "long ago." Celia Temple! I am thinking of *thee*, and of that sweet evening in May, when thy young friends gathered around, and saw thee stand up in thy bridal robes, and heard thee speak the holy marriage vow. I am thinking of Lionel DeLeon, the handsome youth who looked upon thee so fondly that night, and called thee his bride, and thought thee *his* forever. I am thinking of Lena Cortland, the beautiful bridesmaid, and of Harrald Graham, who thought of her, "she will soon be mine." And with these I remember all that gathered group. Where are they now? Some are out in the great world, busy in the "battle of life." Some listened to Fame's clear bugle, and followed in her train. And some there are who, with cold, white hands folded over stilled hearts, are laid down in the death-sleep, and

the moonbeams now are falling as gently upon their graves in the green old home church-yard, or in the land of strangers, or on the cold blue waves that hide them from us, as they fell along the paths they trod on that beautiful May night, "long, long ago." Celia Temple was our pet—the pet at her own home, and the pet in all the homes of "Golden Glen." Not for her beauty, though she was very fair, but for the goodness of her heart, and the purity of her mind. It was early in autumn when Lionel DeLeon sought Golden Glen. We knew not then why he lingered so long—knew not why he thought our quiet little village the "sweetest spot this side his own fair vineyard home, on the far-famed running Rhine;" but at last we learned that he had in his keeping the heart of our gentle Celia, and then we wondered not; yet we could but be sad, for we felt that, as the bride of Lionel DeLeon, she could be ours no more—our *own* Celia Temple.

Harrald Graham and Lena Cortland—how well I mind me of them as they were that night. Harrald's education was finished at last, and he had come home to spend the summer. He was looking pale that evening, and his eyes had more than their usual brightness. "He was only tired of close confinement at school," he said. "He would soon be well again, now he was once more at the dear old home." "His mother had feared to have him out in the damp air of evening, but he could not resist the charm of the beautiful *moonlight;* and then Lionel and Celia had delayed their wedding, as Celia wished Lena and himself to stand with them that evening." Dear Lena! how happy she was to have him with her once more. They were engaged before he left for school; both had proved true to the vows spoken while yet they were children; and now, when Harrald should again be well—when the still September came—they were to speak the words which Lionel and Celia had that evening spoken. Oh! well it is that the future is all unknown to us; well, indeed, that we may not lift the veil and look upon the paths we are to tread. Well was it for Lionel and Celia DeLeon that this might not be. Well was it for Harrald Graham and Lena Cortland. Aye! well for all that gathered group. Celia's grandam said "she had heard the death-watch in the wall that night." She said "it was no good sign that the robin had sung so sadly in the weeping willow as the sun went down, nor that the white roses were out so early in May; all were omens of death." So she told Lena, "she would not say so to Celia; it might mar her happiness." Light-hearted Lena! little heed did she give the omens as she bound the budding blossoms in a garland for the fair bride. Lionel and Celia remained at "Golden Glen" one week after their marriage, and then the parting came. Many were the promises made to write often, and never, *never* forget the olden times. And then she was not to stay from us alway, for Lionel had promised that in two years, when business had been rightly arranged, they would return to America, and call it their home. Still a sadness we could not account for stole into our hearts. The old house looked so lonely after they were gone. The sound of the night wind seemed so sad, as it shook the woodbine she had twined around the window, and from all the paths she had trod there seemed to come one echo: farewell—farewell! Consumption! death-knell of how many fond, bright anticipations! It was hard for Harrald Graham to know that he might not live—hard to know that all Hope's bright promises were untrue—hard for one so young, so gifted. Yet he heard the sentence with calmness, checking his own sorrow that he might speak words of comfort to his widowed mother, and young sisters, and Lena—his own Lena Cortland. It was hard for *her* to cease hoping, and so she was ever saying, "Oh Harrald! you will yet be well; we shall yet be happy." But when the time drew near they had set for their bridal; when the still September came, and he could no more walk about in the home paths, as they had been wont to do, hope died in her young heart, and she spoke no more of the future. Day after day she sat by her dying friend. She wept not, but the roses faded from her cheek, and the light of happiness no longer lingered in her eye. October came at last—the grand October. It was at the close of a soft, hazy, "Indian summer" day, the last that Harrald Graham was to see. All felt that this must be so. "Weep not for me," he said, "for I go to a land where there comes no sorrow. The pure in heart shall meet again where no farewells are spoken. You will not stay from me long; mother, Lena, I know you will come soon." Aye, so it was. Lena lingered not long. Ere the March winds were heard in the forests, she was missed from the homes of the poor, where she had been wont to come and go like an angel of mercy, and missed from her place in the little church. Cheerfully she spoke to us all as we came in to see her. "Death did not seem now as once it did," she said; "she was willing to go, for she knew there was light on the other shore." Many were the messages she left for Celia—many the tokens to be given her when she came. And so she passed from us, just as the first notes of the robin and bluebird were heard in the woodland, and we made her grave beside Harrald's, and the same willow waves over both.

Letters came often from Celia—long, kind letters—telling us she was very happy in her fair, vine-clad home, and yet we knew well she was longing all the while for the dear ones she had left. "They were coming home soon; only waiting for the spring-time now. Their little Lena (named for our dead Lena) was very beautiful," so Celia's letter said; "she was sure we would all soon learn to love her." Dear, gentle Celia! Another letter came at last, but oh! not from her. It came from Lionel, telling us she had gone from him forever. "She passed away so peacefully," he said, that

> "They thought her dying when she slept,
> And sleeping when she died."

"There was no more sunshine for him," he said. "His heart was buried in the grave with his beautiful Celia." Little Lena was all he had to live for. He was coming with her to America—coming to the home her mother had so longed once more to see. Oh! the great grief that filled that household when those tidings came. Alas! for the beautiful sunshine, so soon turned to darkness. Alas! for father, and mother, and brothers that had watched so long, and thought she was almost there. Oh! that ill-fated ship! Many there were that waited long for its coming—waited and still hoped on—hoped on, till at last the tidings came, lost at sea—*lost at sea.* And thus they sleep. Harrald Graham and Lena Cortland, side by side, in the old home church-yard—side by side, while the silent years go by; Celia alone on the banks of the running Rhine—alone, in a land of strangers, far from the fair home of her fathers; Lionel and little Lena down deep in the coral caves of the sounding sea—deep 'neath the roll of the dashing, foam-capt waves. They are gone—all gone.

"They that with smiles lit up the hall,
And cheered with song the hearth.
Alas for love, if *thou* wert all,
And naught beyond, O earth."

CAMBRIA, N. Y., June, 1860.

Pen Illustrations of the Drafts.

QUIMBY BRETT.

Illustrated on Plate VIII.

THE designer of this very pretty brett is Mr. Young, one of the partners in the firm of Messrs. J. M. Quimby & Co., Newark, New Jersey. To him we are under obligations for permission to publish it.

As the design shows, there are some original features about it, to recommend it to our patrons. In it are combined a degree of lightness of appearance and the facilities of short turning. The panels are of French-wood design, which, as may be learned from an advertisement in our pages, can be purchased in New York city, of American manufacture. Very little in addition need be said, as we think the draft sufficiently "speaks for itself."

AMESBURY ROCKAWAY.

Illustrated on Plate IX.

VISITORS from New York to places east of New Haven will find that the styles of carriages designed for the Boston market are altogether different from those made for the metropolis. There are several peculiarities about them of a marked character. In the first place, they are made heavier. In the second, all corners to the bodies, where the principle can be carried out, are made *rounding*. In the third, almost everything is lined with cloth; and, fourthly, finished plainly, to the exclusion of both white stitching and striping. The drawing we are enabled, through the kindness of Mr. Charles E. Nichols, of West Amesbury, Mass., to give this month, is a very fair sample of the Eastern styles. The front seat, being provided with hinges, is calculated for being thrown forward when an *inside* passenger enters, which allows of the body being made much shorter. The seats, too, are set very high, which gives ample leg-room—a matter more strenuously demanded by the Eastern than Western customers.

BRACKET-FRONT BUGGY.

Illustrated on Plate X.

THIS drawing is after a photograph from a buggy made by Mr. C. O. Cole, of New Bedford, Mass., for an enterprising gentleman of that place, at a cost of $200, including pole and shafts. To this buggy was applied a set of Sarven's patent wheels, which for lightness and durability, we are told, excel all other wheels made. These wheels, as will be seen from their advertisement in its proper place, are made by the New Haven Wheel Company, and are worthy of the inspection of the craft.

LIGHT ROCKAWAY, WITH FLOWERS' PATENT SEAT.

Illustrated on Plate X.

THIS is a light rockaway, as built by William L. McDonald, Broadway, New York, with Flowers' patent seat attached. The seat and skirt is so constructed that it can be folded and concealed beneath the front cushion, when not in use. The object is to transform a four-seat into a six-seated carriage, thus making a very convenient family vehicle, and is a cheap and durable arrangement. It is being considerably used by carriage-builders, both in New Haven and Rahway.

Sparks from the Anvil.

HAMMERCLOTH SEAT ON LOOPS.

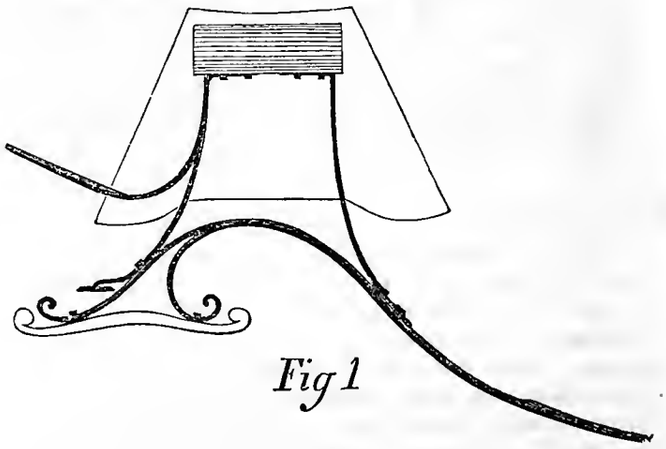
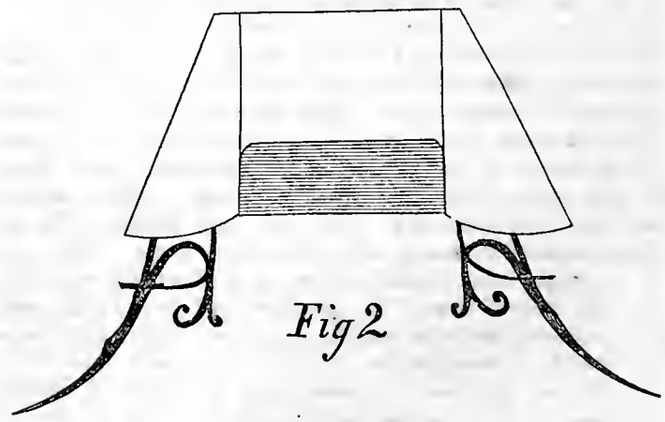


FIGURE I. represents the side view of a plain hammercloth seat, with four corner pipes, covered with drab cloth. The long stays running under the seat frame are bolted to the loops, the front one terminating in a step projecting



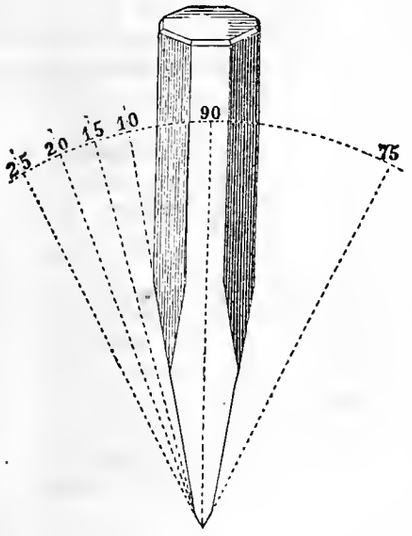
out side-ways, as seen more plainly in figure 2. The braces, designed to support the foot-board, should be wel-

ded on solid to the front stay supporting the seat. This arrangement makes a very light and pretty finish to the front portion of the carriage.

USEFUL OBSERVATIONS FOR CARRIAGE-SMITHS.

COLD CHISELS.

Cold chisels are very important articles in the carriage-smith's *kit*, and yet how few there are who take the pains to have such tools *just right*. Our friend Todd, whose new work is noticed in another part of this Journal, recommends that, as in the diagram annexed, such be ground to an angle of twenty-five degrees, as being the best form for durability.

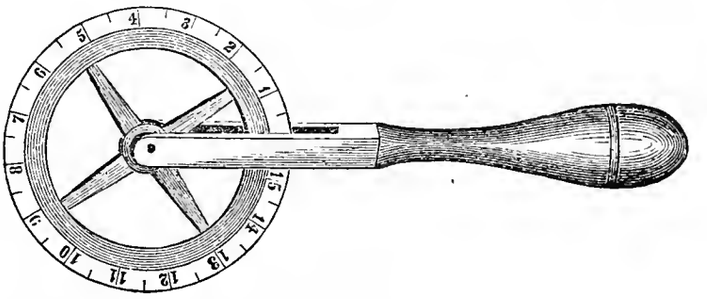


But this is not all. Much depends upon the temper given to the chisel. All chisels should be heated in a *charcoal* fire, and the following directions afterwards observed, as recommended by our author.

"When a piece of steel is heated to redness and immediately plunged into cold water, it is rendered as hard as it can be made, and as brittle as a file, which possesses no tenacity. When steel is heated to certain different degrees it emits different colors, each color corresponding to the different degrees of heat. For example: if we heat the end of a steel bar, or chisel which has good steel on the end, to redness, and thrust the end into cold water and cool it for an inch or two from the end, if the steel is not rusty, by looking attentively at the steel between the hot and cold steel we shall discover several colors. As the cold steel is being heated up, a kind of greenish color will be perceived, and a little farther towards the hot part of the tool the steel will assume a kind of straw color; and between this color and the hot portion the steel will assume a sky-blue color. Now when all these colors are discovered in ordinary steel, if the whole were plunged into cold water and cooled, those parts of the tool which presented different colors would possess different degrees of hardness. If the cutting edge of the tool were formed in that part which presented a greenish-white color it would be so hard that it would not retain a cutting edge, either for cutting iron or wood. Now if this hard or grey portion of the tool were ground off until the cutting edge is formed in that part which was of a straw color the cutting edge would usually be hard and tough, suitable for cutting iron."

MEASURING WHEEL.

A good wheel for measuring tire, etc., is very necessary in a blacksmith's shop. Such an article is illustrated in the cut here given. It should be eight or ten inches in diameter, and, as our author recommends, instead of being flat on the surface of the outer edge, should have *a sharp*



edge entirely around its circumference. If wider it is more liable to give a false measurement and the trouble of rewelding a tire. Care should be taken to *run* the wheel in a straight direction, to ensure correct measurement.

For these hints and illustrations, we are indebted to the *Young Farmer's Manual*, noticed in another column.

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page* 34.)

THE directions for painting a body in the February and March numbers, at page 191, of Vol. 1, are clearly and explicitly given, and ought to, if followed, turn out a good job. Mr. Tinker does not say what kind of a job his instructions apply to, in discussing this, that, or the other mode of painting carriage-work. In our zeal and ambition to do it right, we should not forget the interests of employers. The directions our friend gives ought to make a good job of a 1,400 dollar coach. You cannot very well pile more than 5 coats of varnish upon any new work, and I question whether it would pay to put a 250 dollar buggy, or a 300 dollar chaise or carryall, through such a process. Five coats of varnish, with 4 rubbings, is rather excessive, even for large work; and if a good surface can be made upon the third coat and let the fourth be the finishing one, I question whether the job would not be a trifle better without the fifth. The first coat of varnish should not be what we term a "full coat," for by that we would imply a "flowing coat"—as much as you could conveniently put on without its running—and if they have body varnish that "becomes hard" in three days up at "Sugar branch," we don't get any such article in the State of Massachusetts; but no doubt the difference would be found in our respective opinions of what constitutes hard varnish. I cannot agree with his directions for mixing the color, when he says, "It is now ready for the color, which should be mixed as follows: 1 part raw oil, 1 part varnish, 2 parts Japan, and 4 parts turpentine." The mixing of colors should be regulated by the kind of color you use, and as I have before observed, varnish should be entirely kept out of color. There is no occasion for using it, especially if you wish the work to stand. The Japan, in this instance, I expect, is used for

a dryer. Our friend will find that it will amply repay him to grind a little sugar of lead, and leave both the Japan and varnish out of his colors.

The remarks of the same gentleman, in the April No. of Vol. 1, at page 212, might be followed, with other instances, that help to injure and destroy carriages. A vehicle that is well constructed in every branch, and is well taken care of afterwards, will wear one-third longer than one treated the reverse. Most men who are thoroughly acquainted how to keep a carriage in good condition, will tell you that one-half the men that pretend to know how it should be done, are ignorant of its principal features. In washing a body bespattered with mud, it makes every difference to the appearance of the surface whether you soak the dirt and float it off before the sponge, or let it get under the sponge and scourge the varnish, filling it full of scratches and taking the gloss off. This is fully appreciated by coachmen who drive the aristocratic nabobs of Europe. They themselves are waited upon with as much reverence as they wait upon "his grace" or "his lordship," but they (a great majority of them) never allow a second person to touch the body part of their carriage. That may be the only work they soil their hands with. They have lackeys to wash off the carriage part, to feed and harness the horses, to do all the stable work; but washing the body and brushing the lining is sacred to their own hands, by which means the durability of the vehicle is greatly increased.

The buildings carriages are kept in should be as much considered as any other thing. A low, ill-ventilated coach-house, in the vicinity where steam rises from manure, will destroy the best painted carriage in the world. Nothing tends to crack varnish sooner than steam from manure, especially if a carriage so exposed is not washed off at least once in twenty-four hours. A damp coach-house is equally ruinous to carriages. The side standing near the wall will almost always crack if allowed to stand any length of time. Carriages that are washed with impure water are liable to "cut up" all kinds of capers, which, of course, is always laid to the painter, or the bad varnish. A well so near a stable that its drainings are likely to affect the water, and carriages washed with such water, run a good chance of becoming cracked. Upon looking at a coach I painted, some five months after it had begun to run, I was surprised to find one fore-wheel all cracked down to the lead, while every other part of the vehicle was good. I knew they all went through the same process, and I felt confounded, until the driver told me he drove a *female horse* on that side, and she frequently scattered her *cologne water* over it, which made it crack after but a few days running. There are other circumstances which go a long way towards destroying the durability of carriages, but which the builder has to shoulder, who in turn blames the painter, when all are innocent.

The question of P. Nelligan, at page 11, about "The Blistering of Varnish—A Query," in the June No. of the 2d volume, I have not yet seen answered, and it takes but little to answer it. It is quite certain the exposure was the first cause of the carriage blistering; for had it not been allowed to stand in the sun "two hours," it would not have been blistered. In the next place, the builder is responsible to the purchaser, and the painter to the builder. Should it be one coat of varnish blistered from another, or all the varnish from the paint, the varnish-maker may be safely questioned as to the quality of his varnish; but should the color blister from the filling, or the filling from the lead, or the lead from the wood, then the skill of the painter might be brought into question, but even this would not imply that he would be a bad workman. One single coat of paint given, if not mixed in accordance with what we call "good painting," no matter how well it may have been painted previously, or after this obnoxious coat of paint is given, it will give the whole job a chance to blister or crack.

Mr. Tinker, in his directons "How to Paint a Carriage Part," falls into the same error as in the painting of a body—that of giving three-fifths more varnish than necessary. Nothing can be more absurd, in my estimation, than painting a carriage after the manner here laid down. Carriage-builders do well to fail if all helps use the quantity of stock, and take the necessary time, it would require to put a carriage part through the "course of sprouts" here given. After all the leading and sand-papering, coloring and dusting, we are told to give the carriage one coat color and varnish, one coat of clear varnish, one coat of color and varnish, stripe and ornament, and give one flowing coat of varnish, "and should it be an extra fine job, after it has stood five or six days, you will rub it down, and apply another flowing coat of varnish." Were I going to purchase a $300 buggy, painted after this style, I would freely give $25 more for it if the second, third and fourth coats of varnish were off it. But Mr. Tinker does not propose to do it properly, but sets a bad example, as I have before observed. Between every coat of color and varnish, or clear varnish, it should be well rubbed with woollen cloth and ground pumice-stone, and a part of the varnish taken off again, to obtain a surface. Just to "take a handful of curled hair, or a piece of hair cloth; and, if you can't get either of these, just take a fine piece of sandpaper and rub over the work in order to smooth down the lumps," is worse than nothing at all; giving four coats of varnish and no thorough rubbing, is one way to paint a carriage part, and no mistake! I would like, here, to fall into a revery as to the difference between painters and their mode of painting, which makes some men worth double the pay of others, and which employers grumble to pay one dollar a week more than just what *they* think their pay ought to be; while men that thoroughly know their business, can make more difference in a day's work than their day's pay comes to, in the quantity they get through and its workmanlike finish, and will often make the painting of a job come to fifty per cent. less than an inexperienced green hand can finish it for. That which I have remarked upon bodies, is equally applicable to carriages. If the surface is made upon lead, the color given, and one coat of color and varnish, or of clear varnish given, then thoroughly rubbed down with woollen cloth and ground pumice-stone, and one flowing coat of English varnish applied, does not make a good job, it is incapable of being improved with a third. Two coats thus given, would be far better for the durability of the carriage, and the pocket of the builder, who has to pay wages, than four coats given and only scratched over with curled hair. With respect to passing the chamois over color, it ought not to require it, and only does require it when too much oil-varnish and Japan is used in mixing colors. There is such a thing as using too much oil, as well as using too little. In my opinion, no solid color should dry with a shining surface, but with a "subdued metallic-looking ap-

pearance," described by Mr. James Scott; and when it does dry, so passing a chamois over it would leave more lint and fuzz than what it would take off, making a luster more preferable. The passing over a varnish surface with a chamois is no reason it is requisite to do the same to a colored surface. Besides, the smut and smoke which collects upon a carriage that has been standing "two or three weeks," is sufficient to make paint crawl, and, especially, if oil predominates in the color used for striping, and passing the hand over will do as much as the chamois; but it ought to be well rubbed, and then there is no fear of the striping running into "drops."

"The floor should be well dampened, previous to dusting off the job," our friend says. There are various opinions respecting this. When English varnish goes bad, there are a great many men that would lay the fault to the damp floor; and I think it is very plausible, if you have not a fire in the room to counteract its effects; if not, it might prove disastrous to the job. Mr. Tinker seems impregnated with the idea that he can make good Japan, (I don't deny it), and gives us a receipt how to make a good dryer. But I think carriage-builders would do well to consider whether it actually pays to make their own Japan. The fuss and trouble an inexperienced man makes, the implements you have to procure, the expense and trouble of buying the stock, and then running the risk of its being properly made, altogether make it, in my opinion, a losing game. If you buy a barrel of Japan, and it turns out bad, you can return it, with a good grace; but if your own is bad, your cost of time and material is all lost, and even should it be useable, it may destroy all the work you apply it to. More than one-half of the Japan made by painters that have not the proper means to make it with, is not worth using, but is used because the would-be-maker dares not complain of it.

With respect to Mr. Tinker's remarks upon raising first this wheel, and then that, in order to get at a carriage part, I would remark, that painting wheels upon carriage-parts, all oiled ready for running, is entirely an American invention. It is one of those go-ahead, knock-'em-down ways of doing work, which is susceptible of great improvement. Probably you would never see a wheel painted and varnished upon an axletree in your lifetime in any old country, and when you wish to paint a *coach* carriage proper, you cannot do it with the wheels on as it should be done. It is only a make-shift.

My predecessor, "Old Fogy," in the August No. vol. 2, introduces us to the opposite class of painters to those we have been discussing. One coat of varnish upon a new carriage, is as much too little as five are too much, and it is a fact, that too little is thought of carriage parts. A great many men labor under the idea that it is something degrading to touch a running-part. All such men are to be pitied. No matter how well a body may be painted, if the running part does not correspond, it detracts more than one-half from its general appearance and beauty; and many men, if they get a passable color upon the body, think anything will do for the running-part. It is sufficient to say that all such men should be considered "thorough workmen."

Old Fogy has hit the right nail upon the head in speaking of the warmth of shops, of which I have spoken; but I think it is not essential that work should stand in the sun in order to obtain a good job. It is generally acknowledged that some of the best and a share of the worst painting done in any part of the world is done in London; and to advise a cockney to sun his work would take considerable ingenuity on your part to knock it into his head what you wished to convey, and when he did understand he probably would tell you that he never sees the sun himself more than three or four times in a year, to say nothing of dragging his work out to be sunned; in cities like London, where every foot of land is valuable, there are but few platforms to sun carriages, I assure you. I have no objection to work standing in the sun, but I cannot see that it makes any great improvement if you have good warm shops or shops which may be made warm. The "Old Fogy's" remarks respecting the time necessary to paint a good piece of work will be endorsed by all painters, and should be consulted by those employers who imagine that painting can be put through with the velocity of steam; but I am sorry I have to differ with his conclusions "on the sweating out of varnish:" varnish that is not properly dry when being rubbed may sweat out, but not the same as varnish that the oil in it is not properly "killed," not properly manufactured. Three coats of varnish laid upon the top of each other before the last is dry and hard, will adhere to each other and act the same as though only one coat had been given; it will make one cake; and when the surface is dry the first two coats have no power to penetrate to the surface of the third. How long does Old Fogy think it ought to take good varnish to dry and harden? I will say six days for a moderate coat, but I have used varnish that will not harden in six weeks. How is it that, when I have varnished a carriage-part with this varnish, one coat upon (we will say) quick drying color, let it stand ten days, and then rub it down, in two hours after it shines as though it had never been rubbed? It is not because one coat was put on before another was dry, for there is but the one coat on it; but because the ingredients it is composed of are not properly boiled, and the oil predominates over the gummy substances, and so rises to the surface and shines, which we term "sweating out." After work, with this varnish upon it, has run six weeks or two months the shine goes all off, as though it had been nothing more than so much oil upon it; some of this varnish I used for the first coats upon bodies, and have put a hard drying varnish over it, has stood three months, then rubbed for the last coat, and in such places where it was rubbed down to the first coat (to this sweaty varnish) it would have a bright gloss upon it, and after being finished and standing ten days, in all such places, cracked, while the remainder of the surface remained perfect; between the rubbing for the last coat and the varnishing it stood some six weeks, but the sweaty varnish never came through to the surface of the hard drying; after standing four months in a clean, dry show-room there were no signs of a crack, except in such places as where it was rubbed down to the first coat of varnish. The English hard drying varnish will sweat out a little if rubbed under ten days; its agent in New York asserts it will dry, and is ready for rubbing after three or four days, but I would respectfully tell that gentleman that it is no such thing, he might in testing it upon a piece of board in his warm office think it sufficiently dry, but I have ruined a thousand dollar coach by crediting the story, and laying one coat of it upon another after its standing but four days; the surface felt dry but it was not hard to the bottom, the consequence was that it cracked after running but a few months. The firm that built this work had had so much

trouble with American varnish that they resolved to use English exclusively, hard drying for under-coats, best body for finishing both bodies and carriages, an example all builders will do well to follow, who can allow their work to stand the required time to harden, and that cannot get a good article of American manufacture; first, try all you know to obtain a good American varnish, for it is your duty to do so, to encourage home manufacture, but rather than sacrifice your reputation as a builder and bring your work in general disrepute, you owe it as a duty to yourself, and the customers who patronize you, to procure an article that will give satisfaction. No varnish, of whatever manufacture, will dry and harden and should be rubbed under eight days, and in my opinion varnish is as capable of shrinking and collapsing as soft wood, and should be so treated, and a proper time given to the "seasoning" of it.

(To be continued.)

ISRAELITISH VARNISH VENDERS.

Our friends are cautioned against purchasing varnishes from the "hooked-nosed gentry," who perambulate the country, in search of victims. They not only *shave* in the *quality*, but also in the *quantity*. It is not an unusual thing to find a half-barrel short some three gallons, or more. And then, as rosin is much cheaper than shellac, *that* is *extensively* employed in the manufacture, which, although it may increase the profits of the vendor, does not serve to increase the purchaser's custom. We have heard of coach-makers who have consented to receive a gallon, being saddled with a half-barrel at a short interval thereafter; indeed, it appears to be the policy of these gentry to keep a customer well supplied with *their* trash. Woe be to the fellow who allows himself "*to be Jewed*," seems to be the rule. It is better to have nothing to do with them, or their varnishes. Buy your varnishes of respectable business men, such as will be found advertising in this Journal; such as never send articles unless duly ordered, and then are willing to warrant their goods as represented. Follow our advice, and you will avoid much trouble.

ORIGINAL ORNAMENTAL SCROLLS.

In response to the numerous calls of carriage painters, we are happy to be able this month to present them with a few original designs of Scrolls, with the hope of being able hereafter to add to the number. Those who wish to avail themselves of these figures, and still preserve their copies for binding, can do so by laying a piece of tissue-paper over the engravings, and tracing them thereon with a common lead pencil. Numbers 1 and 2, are from original drawings, furnished to us by Mr. H. D. Moore, of Watertown, New-York.

No. 1. Paint and lay the scrolls in gold, afterwards shading them with burnt sienna and aspalthum, and the points lilac, (ultramarine), shaded to fancy.

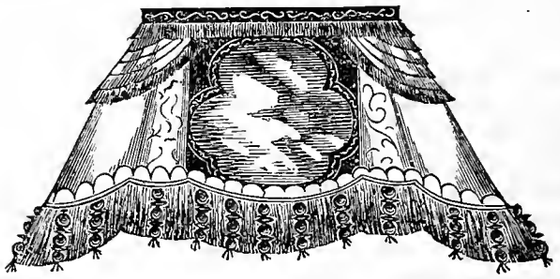
No. 2. This may be painted red, and shaded, with purple lake, and on lilac, with light asphaltum.

No. 3 is original with our friend Jas. Scott, but he not having given any instructions for executing it, we shall leave that matter to the ingenuity and taste of the mechanic, simply remarking that we have so much confidence in our readers, that we really believe they will do as well without as with anything we may say about it, in addition to giving the design.

Trimming Room.

HAMMER-CLOTH WITH VELVET CENTER.

Figure I. represents a very rich pattern for the hammer-cloth seat of a coach, being composed of dark brown cloth for the corner pipes, with silk to match for the



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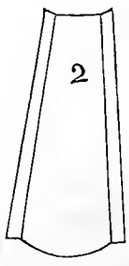
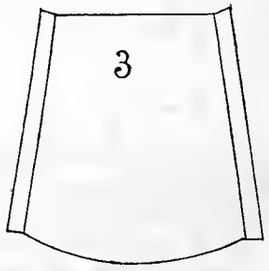




smaller pipes, and dark bronzed velvet, with a fancy figure of lace for the center pieces. The shoulder pieces are made of heavy pasteboard, cut into the shape shown in the drawing, and stitched to the seat at the ends.

Figs. 2, and 3, show the manner of cutting the pipes with their edges, and should be sewed together and painted with a light lead color, before covering. This trimming makes a neat job.

GENERAL REMARKS ON CARRIAGE-TRIMMING.

We doubt if any other country can show as great a variety of designs for carriage-linings as our own, and yet with many variations there is much similarity in them. So much is this the case that it is seemingly difficult to find anything new. In our recent travels we had the opportunity of seeing some carriages, however, that were novel to us, and we believe willbe to our readers when we present them with designs from our portfolio, hereafter.

Among our eastern friends patent-leather for linings and cushions is entirely discarded, and we think with good reason, for we cannot imagine anything invented more injurious to a lady's silk dress, or, unless it be a stove, more inimical to a gentleman's comfort in summer. It is, therefore, with particular pleasure that we chronicle the evident fact that cloth linings are once more returning into general favor, and we hope the fashion of using leather will never again prevail, except in cases where exposed to the weather.

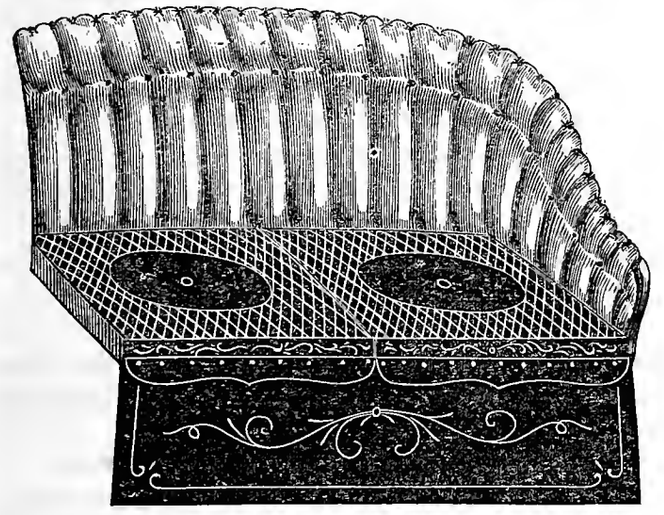
In New York city, so tenacious of customs, we see a great improvement in this respect, and predict that the hour is not distant when the cloth will entirely supercede patent, or enameled leathers, in the finish of carriages. Cheapness, aside from other considerations, is sufficient, we would think, to recommend its general use.

For the New York Coach-maker's Magazine.

THE ESCALOP BACK.

SPRINGFIELD, O., June 25, 1860.

MR. STRATTON:—*Dear Sir,* Enclosed you will find what is called an escalop back, made in rolls, with a regular swell in the center. The buttons in the top of the back are drawn in tight, which makes a fullness in the leather, which is laid over in a close fold. The roll on the top can be made either with shell work or smooth, according to the fancy of the trimmer.



The body portion of the cushion is cut the size required for the seat and creased. The oval in the center may be cut out and put in with an inch fullness all around, with a button in the center. When stuffed, and finished up, it makes a neat job, either for a carriage or buggy.

Yours, respectfully, R. J. BECK.

ANNOUNCEMENT, &c.

THE next number of this Magazine will contain several drafts of sleighs, as the time for getting them ready for winter has come. We have been obliged to lay-over several articles for lack of space; this will explain to several correspondents the reason why their communications do not appear this month.

The New York Coach-Maker's Magazine.

AUGUST 1, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

RENEW YOUR SUBSCRIPTIONS.—*Our present subscribers will please bear in mind that our rule is to stop the Magazine when the year expires, unless they renew by sending us the payment* IN ADVANCE. *To secure a complete series, therefore, our friends will see the necessity of being prompt, for we intend to regulate our edition of the* THIRD VOLUME *as near the wants of the craft as is possible. Southern, Western, and Canadian money, or post-office stamps, will be received at par. Subscribers in the British Provinces must remit twenty-five cents extra, to prepay postage for the year.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Name-plates furnished to order, of different patterns, for from* $14 *to* $20 *per hundred, at this office, or sent according to directions, by express, payable on delivery; to which express charge must be added.*

☞ *Mr.* JOHN HEWLETT, *of Toronto, is the only agent we have in Canada West.*

"W. H. W., of Va."—We do not remember ever seeing hickory carriage-parts stained, although, should fancy dictate, such might be done. Thank you for the compliment to "our welcome visitor."

"G. S. C., of Ala."—Our knowledge does not embrace the work on scrolls for painting. The best selection will be found in our pages.

"W. R., of Washington Territory.—Your wishes as to mailing will be accommodated. The covers must be prepaid, 11 cents postage, and can in no case be forwarded without.

EDITORIAL VIATORY.

LONG confinement within the walls of the city, and the benefits offered to health by a ramble in the country, induced us, on the 12th of June, to make a flying visit to the craft in the eastern section of New England. Our first stopping-place on this occasion was in New London, Ct., distant from New York by railroad 126 miles. The harbor at this place is one of the best for ships to be found anywhere in the United States, but the vessels belonging to that port being mostly engaged in the whale fishery, and that at present being very unprofitable, has cast its blighting effects over the carriage business in that locality. We, however, succeeded in adding a few names to our list of subscribers in the largest shop in the place.

In Mystic, eight miles farther eastward, we found our friends Messrs. Johnson & Denison, who appeared to be favored with a fair share of business. To them we are under obligations for the attentions extended to us on our visit. From this point to Stonington, we varied our travel by a steamboat trip down the bay. This portion of the Sound offers the most inviting grounds for the gentle angler's recreation to be found in New England. "Old Izaak" would have rejoiced at being permitted to

wet his line in the clear waters which lave the beach between the Mystic River and the rock-bound shores of Stonington.

There is but one shop in Stonington where carriage-making is done, but the proprietor of that appears to be doing a very fair business. The place is notable in history as having, in our last contest with England, successfully withstood a spirited bombardment. In one of the principal streets, elevated on a pedestal of stone, may now be seen a trophy in the form of a shell from which a daring soldier, at the imminent risk of his own life, plucked the lighted fuse, which rendered the missile harmless. At the present moment, a little wren, in peace, has appropriated the cavity to the rearing of a brood of future songsters. From this place, by rail, we pursued our journey onward to Westerly, R. I., where the Pawcatuck Carriage Company have established themselves. This being a manufacturing place, the sound of the noisy spindle is heard during the day, sounding a death-knell to carriage-making generally, as this class of people can seldom afford to ride in a carriage, and, besides, seldom find time for such luxuries. At eight miles northward we visited the extensive carriage manufactory of the Messrs. A. L. Wells & Co., where we were agreeably entertained.

Providence, in the same State, may be named as the largest carriage-manufacturing city between New Haven and Boston, and yet the business is quite limited for so large a place. The largest shop is that of our friend Allen Greene. Besides his, there are some half dozen others, doing considerable business. At Attleborough, Mass., there is a very fine shop, owned by Mr. E. Bailey, and the work he gets up is second to none. In Taunton we found three shops, and several at Fall River and New Bedford. In the latter city the principal manufacturers are George L. Brownell, William G. White, and G. O. Cole, who are doing a very good business, when it is remembered that this is the most noted place for citizens engaged in the whaling business of any port in the United States.

In consequence of the popular use of gas and camphene, there has latterly been a great falling off in the price of whale oil. To give encouragement to its renewed use, a committee of the citizens of New Bedford offer a reward of $4,500 for the best hand-lamp accommodated for burning oil, the invention to be patented—if not, the right to reject is reserved. To still further avert the prospective falling off of trade in the place, a combination of capitalists have recently decided to establish a cotton-mill of ten thousand spindles, at an estimated cost of $150,000. This people have always exhibited a commendable spirit for enterprise, and, as everything about the place shows, with success. They unquestionably entertain a poor opinion of "loafers," as the following notice placed over the door of Liberty Hall evinces: "☞ Attention is called to the loafers in and around this doorway; ☜" which, judging from the swarm of idlers on an opposite corner, is not without effect.

Between New Bedford and Boston are many very thriving villages, but the shoe business prevails so generally that there is but a small chance for carriage-makers to breathe; and when a shop is found, it is so *choked* up with bosses the only wonder is *they breathe* at all. In the same establishment will be found the *boss* wood-workman, the *boss* blacksmith, the *boss* painter, and the *boss* trimmer, and if by accident a journeyman should be found there, he may be set down as a curiosity. When we inquired the reason for this state of things, we were gravely told that the proximity of these shops to Boston discouraged all attempts to the getting up of new work. For our part, we judge that the bare idea to a customer of being obliged, when ordering a new carriage, to bargain with four *bosses* in one shop, is sufficient to intimidate any one, and send him to Boston, or even farther off.

In the modern Athens are several carriage depositories, as they are here called, many of them supplied from their own large manufactories in New Hampshire. Among these may be mentioned Messrs. William P. Sargent & Co., who, we are told, sell carriages annually to the amount of $175,000, many of them being of a light description; that of the Messrs. Sargent, Harlow & Co., noted for the manufacture of fine chaises, many of which find their way to the New York and Washington markets; Mr. John P. Whittier's, Edward Riddle's, D. H. Bailey's, and Isburgh & Johnson's, all of which appear to be doing a large business, either at auction or private sale. The manufacturing shops *in* Boston are Messrs. James Hall & Son, Lincoln & Duclos, and Russ & Co., where a good style of work is made. In Roxbury we had the pleasure of making the personal acquaintance of Messrs. Nichols & Thomas. The last named gentleman we hope hereafter to introduce to our readers frequently as a valuable contributor.

At Dorchester, famous in our Revolutionary history, we called upon Mr. D. F. Brown, the patentee of "the Brown wagon," who has a very thriving carriage manufactory there, of his own patented wagons and others. In our travel we found many other shops where "the Brown wagon" is made, and from the fact that we saw a great number of his wagons running in and around Boston, we conclude that the Brown wagon must be very popular with the people. From a personal trial with one, we are qualified to recommend them as very superior to any other for easy riding and noiseless running. The vibratory motion of the spring-perch has the tendency of facilitating the draught, which, combined with other qualities, must bring them into special favor with the public.

In Haverhill, a thriving town on the banks of the Merrimac, we visited the shops of our friends, A. Whittier and John R. Bartlett. This latter gentleman is one of the warmest of the friends to this enterprise, and it affords us the highest pleasure, in this connection, to recommend his newly-established shop to the notice of the craft, who may desire to purchase their carriage-bodies, ready-made. Any order entrusted to him will be faithfully executed, we make no doubt of. In the three Amesburys there are several shops, to enumerate which, would exceed the entire limits we have assigned to this article.

Nine miles northward from Amesbury, by stage, we visited Exeter. Here we found the large carriage-manufactory of Messrs. Head, Jewell & Co., who have their depository in the city of Boston. In the person of Mr. Head, we found an agreeable friend, and the kind reception we met with at this establishment will be looked back to, in after life, with pleasant emotions. This is an old and substantial firm, and under the direction of so intelligent and gentlemanly a manager as Mr. Head, is sure to bring honor to the profession. May he long live to enjoy the fruits of his labor. Sixteen miles still further north, at Dover, we called upon Mr. L. Everitt, who is the principal carriage-maker in the place, of some years standing, and quite original in the construction of some of his carriages.

Our next stopping place was Concord, N. H., a place famous as giving name to the Concord-buggy and supplying the world with post-coaches, of superior durability. Our stay here was brief, but the Messrs. J. S. & E. A. Abbott, through their obliging foreman, Mr. Webster, facilitated our mission with such effect that the interests of this Magazine were greatly promoted. Here we found the finest collection of stock for the woodwork of vehicles we ever saw—400,000 feet of plank and 100,000 spokes; sufficient, we would think, to supply the shops of all New Hampshire, *but all intended for their own use.* The other shop in the place is Mr. L. Downing, Jr.'s, who with the former firm enjoys the reputation of doing the best kind of work, and which seems to attract customers from all parts of the world.

At Worcester, Mass., on our return home, we called upon Messrs. A. Tolman & Co., and through the courtesy of their foreman obtained several patrons to our Journal. The proprietors of this shop have practiced an entirely new mode of hanging up phaeton bodies, by the use of steel springs, that supersede the necessity of a perch. We were also shown a novel form of carriage tops. The novelty introduced into these vehicles has gained for the firm increased patronage. From Worcester, *via* Norwich and the Sound, by steamboat, we reached our office, after an absence of nearly three weeks—the longest visit we have made abroad during 25 years. This announcement, we hope, will account to our friends for the lateness in which some of their letters have been answered. The brevity with which we are compelled to pen this article has prevented our following all the details of our late journey, and caused us to pass over some circumstances of quite an interesting nature; and with this fact in view we make an apology for any seeming neglect in noticing some of the smaller shops in our route. To the craft, who have so generously seconded our mission, we return our best thanks, in the hope that they and we will be better able, hereafter, to understand each other,—we to know their wants, and they to have increased confidence in our enterprise.

SUGGESTIONS TO PATENTEES.

THERE is a certain class of men who spare no pains, and are prodigal in the expense they incur, in obtaining a patent for their inventions; but, when that object is secured and their names enrolled in the archives of genius, their ambition dies out, and, if not exactly satisfied, yet they are unwilling to go to any further expense in the matter. They seem to lose sight of the fact that the best patent ever obtained requires *pushing* to make it completely successful, and that with pushing, a comparatively worthless invention, in the hands of an energetic individual, may be made profitable. This is especially the case in reference to carriage patents.

There are a few really valuable improvements which, through neglect in advertising, remain unknown to the public and unprofitable to the owners, and will continue so to remain until the expiration of the fourteen years for which they were granted, unless they adopt a different course for the future. Laying all modesty aside, then, let us counsel you a little in this matter: Presuming that you have gone to the expense of getting your patent, you should, as business men, go to a further judicious expense in letting those concerned know that you have a patent, and you can find no better medium for the purpose than is presented in our columns. You may be persuaded, as others have been before you, by some publishers, to advertise elsewhere; but in so doing you are only throwing your money away. A moment's reflection should serve to convince you of the fact that a work devoted to one special branch of mechanics—and that branch coach-making—is the one for all patents pertaining to the craft; the one in which you can the most profitably advertize. Our Magazine is read by no less than twelve thousand carriage-makers, whilst we venture to assert that your advertisement in any other work, would fail in reaching one thousand, who are even partially interested. As a practical illustration of our theory, we present the following example:

Not long since, a friend of ours had occasion to adver-

tise a new book treating on the subject of Architecture. Instead of acting as sound philosophy dictated, he selected the most extensively circulating newspaper issued in New York city, at considerable expense for the purpose. From that advertisement he did not reap the least benefit. Afterwards, with more wisdom and less expense, he tried the same advertisement in a periodical of less pretensions, but devoted to the special subject of architecture, and, as he told us himself, the result was he sold a number of copies. The reason of this is obvious. For instance, when a coach-maker takes up a newspaper (or, at least such is the case in most instances), he can only find the time to read the news, never expecting to find anything to interest him in the wilderness of notices there presented, and therefore will not take the trouble of searching. With our Monthly the case is altogether changed. This work visits the craftsman in the early part of the month, and is kept on his office desk, or is handed about the shop, until another comes to hand, when the matter is again pressed to his notice, and when continued the entire year, it becomes so thoroughly imbued in the mind, that it will never be eradicated, but every line is "as familiar as household words."

An intelligent correspondent writes us that, on the monthly visits of our journal, he never lays it down until he has read from the beginning of the title-page to the end of the last advertisement on the cover, and that he finds interest in every portion of a number. We have every reason to think that his is not a solitary case. It is a well-settled principle, that they who *spend* the most in judicious advertising, *make* the most money, and in no instance is this more evident than in the cases of most who have favored us for the past two years. We could add names—having the voluntary permission of some for so doing—to prove that ours is not an imaginary boast, and that our Journal is *the* medium for advertising to all who would have their business heralded to coach-makers.

EDITORIAL CHIPS AND SHAVINGS.

The Perch Coupling Suit in Court.—"United States Circuit Court, Eastern District of Louisiana, before Judges Campbell and McCaleb. N. T. Edson *vs.* Dr. Thomas Hunt. This was the leading suit upon which a large number of cases were dependent, among them that of the same plaintiff vs. Denman & Co., the extensive carriage dealers of this city, for an alleged infringement of Gustavus L. Hausknecht's patent of January, 1852, for an improvement in the running gear of carriages, of which plaintiff is assignee for the city of New Orleans. The defendant denied any infringement, and averred that the fore-running gear of his carriage was identical with that described in the February number of the Cultivator of 1847, in the Brevete d'Invention, published in France in 1836, and also in Rees' Encyclopedia, article "Coach," as the invention of Mr. Jacobs, of Soho Square, London, and as constructed long anterior to the time of Hausknecht's alleged invention, in Connecticut, New York city, Quincy, Illinois; Montrose, Pennsylvania; Newark, New Jersey; and other places. Besides the books referred to, a large number of witnesses were sworn, who testified that carriages, with the fore-running gear having its center of motion at the rear of the front axle, and in combination of, with segments of circles moving one upon the other, one attached to the axle, the other to the perch, had been in use at the places mentioned at different periods as far back as 1836, in the earliest instance.

Judge Campbell gave a luminous charge to the jury, explaining the history and object of the patent laws, and applying them to the patent in question. The jury, after an absence of a few minutes, returned a verdict for the defendant, whereupon a judgment followed in all the cases, and the next day the plaintiff discontinued his bill in chancery against the Denmans.

We understand that the jury were satisfied unanimously that there had been no infringement of Hausknecht's patent, in the doctor's phaeton, with the fore-running gear mentioned; and that, if that patent, instead of being a combination different from the article used by defendants, had been equivalent thereto, it covered a principle long before applied and used practically."—*N. O. Picayune.*

Napoleon's Establishment.—The French Imperial stud altogether is composed of from 300 to 400 horses—saddle, carriage, and post-horses; and they are now distributed in five different establishments—at the Louvre, the Tuileries, the Rue Montaigne, Rue de Monceaux, and St. Cloud. The active service is at the Louvre, and the private one at the Tuileries. At the Rue Montaigne are the saddle-horses of the Empress, as well as a number of carriage-horses. Saddle and carriage horses are also kept at the Rue de Monceaux, and the infirmary is also established there. At St. Cloud 60 horses, for different purposes, are always kept. The horses, when required to be turned out to grass, are sent to Meudon; the breeding-stud is at Villaneuve l'Etang. The saddle-horses are all English, and those for carriages English and Norman, and the posting-horses are Norman.

The Whining of a Cockney.—Our readers will remember the late visit of *Sir* Grantley F. Berkeley to these shores, and the trouble he found in transporting his dogs by rail in the West, where he went to see the—buffaloes! When he went home he fell into a fit of spleen, and let off the following "howl" in relation to New York city:—"Lumbering along rails, tyrannizing over all other wheeled conveniences, there you have a cheap omnibus; and when I demur at being shut up with 'Rowdies' and 'B'hoys,' all of them spitting in chorus between their

knees, my democratic friend, who shows me the town, assures me that in this land of freedom *there can be* but one price and *one* vehicle for *all*. 'Well, then,' I remark to him, 'wonder not at my surprise, when, fully impressed with this leveling idea, on coming into New York, I saw drawn up at the side of a street or square what I deemed to be a lot of little Lord Mayor's coaches, bedizened with plated metal, silver, lace, and other profuse decorations, and learned that these were two-horse "hack carriages," on the stand *for public hire*, and not for the locomotion of civic dignitaries, and above all, that the cost of the hire of these *public conveyances* put them utterly and completely *beyond the reach of any but the better and richer classes*.'" A wonderful *close* observer, that *Sir* Grantley!

LITERARY NOTICES.

Six months ago we announced to our readers that our intelligent correspondent, S. Edwards Todd, Esq., contemplated publishing a book, which he modestly calls the *Young Farmer's Manual*. That work has now been published by C. M. Saxton, Barker & Co., 25 Park Row, N. Y., price $1. The volume embraces 459 pages, with nearly 200 illustrative engravings, with detailed manipulations of the Farm, in a plain and intelligible manner, embracing the young farmer's workshop, in which are given full directions for the selection of good farm and shop tools, their use and manufacture. The volume is prefaced by a view of the author's residence. To possess such a house as the cut represents is alone sufficient to almost persuade us to turn rustic and farmer at the same time. How our friend Todd arrived at the knowledge he so confidently imparts to his readers, is beyond our ken, and when we (in confidence) tell the craft that he is an *ex-coach-maker*, they may share in our astonishment. But, somehow or other, some men are always "full of larning." Certain it is, our author has produced a volume—the first of two—invaluable to the agricultural novice, and not without interest and value to the more experjenced farmer. No farmer's library should be without it.

Movement-Cure.—An Exposition of the Swedish Method of Treating Disease by Movement-Cure, embracing the History and Philosophy of this System, with Examples and Directions for their use in various forms of Chronic Disease—being a complete manual of exercises; together with a Summary of the Principles of General Hygiene. By George H. Taylor, M.D. 12mo., cloth, 396 pages. Price, post-paid, $1 25. Published by Fowler & Wells, New York.

The Movement-Cure, as now practiced, was first introduced by Peter Henry Ling, of Sweden. In 1814 the Swedish Government gave it sanction and support, since which time it has been steadily growing in public favor. Dr. Taylor, the author, has given the subject much attention, having visited Sweden for the express purpose of learning the system from its native teachers. The Movement-Cure, as a specialty of medical practice, depends entirely on *physiological means* for the accomplishment of its purposes. It points out the means of directing the corporeal energies into just those channels in which they are most needed, in order to perfect the balance of the physiological processes. It enables the system to develop and maintain its forces in greater amount, because it employs them naturally and without undue waste. And because it thus limits itself to a realm of facts concerning which there is no question, it has a right to expect the approval of physicians of all the different schools, even of those advocating opposing theories. It requires assent only to the plainest and most obvious facts and inferences of physiology. In the Movement-Cure, all physicians meet on common ground and blend their differences.

Those who are tired of drugs will rejoice at the publication of this work; and although they may not subscribe to all its teachings, will find in it much good sense, practical advice, and a *Plan* which all may adopt, and practice at *Home*.

Moore's Rural New Yorker.—This is one of the most interesting weeklies with which we are acquainted. The editor appears by his practical experience in agricultural and literary taste, well qualified to cater for the public, and we are pleased to find that his labor is amply rewarded in a large circulation. It is claimed that the *Rural* is "the most complete Agricultural, Literary and Family newspaper in America." Published by D. D. T. Moore, Rochester, N. Y., at $2 per annum. A new quarter began with the first week in July, and presents a fine opportunity for subscribing for it.

COMPLIMENTARY.

From the American Railway Review.

Coach-makers Monthly Magazine.—This Magazine appears to have established itself firmly. Its editor and proprietor, Mr. E. M. Stratton, is a practical coach-maker, who has long perceived the want of a periodical to make known the designs of American carriages, as they come out, and give them as fair a chance of popularity as foreign designs have attained by means of illustrated publications. His encouragement has led him to devote his time chiefly to the Magazine.

It has four plates, illustrating carriages and their ornaments, and also numerous cuts, showing details of construction, etc.

The publisher anticipates a continuance of the steady increase of patronage which has attended his work for its first two years; and has made arrangements to render it satisfactory in all respects. It has 236 pages of reading matter, most of it written expressly for the work, and 47 plates, besides the cuts. The prices are $3 for single subscriptions, with reductions to clubs and dealers. We think every one in the business will find this Magazine instructive, and the plates of great use to show to customers.

INVENTIONS APPERTAINING TO COACH-MAKING AT HOME.

AMERICAN PATENTED INVENTIONS.

April 17. Improvement in Sliding Carriage-Seats.—Wm. A. Bird, of Newark, N. J.: I claim the steady pins, be they more or less than two, and the eye pieces, when constructed, arranged, and operated substantially in the manner and for the purpose set forth. Also, the irons, V and W, when used in connection with the steady pins, to insure the firmness of the seat.

Improvement in Self-Detaching Whiffle-Trees.—S. D. Bowker, of Geneva, Ohio: I claim, first—The peculiar lever, L, in combination with the ring, A, and the spring, F, attached to the cylindrical box, D, the said lever being provided with a raised part, O, and tongue, N, and said ring with notches, H and I, and slant or trimmed portion, K, as described and operating as and for the purposes set forth.

Second—I claim the employment of the hollow cylindrical box, D, for holding and sustaining the bar or body of the whiffle-tree to the double-tree, or the draw bar of the thills, by means of the shank, E, and screw-nut, for the purpose of maintaining its ordinary horizontal movement, as described.

Improved Forge-Bellows.—Wm. Thompson, of Detroit, Mich.: I claim the arrangement in cylinder, A, of partitions, F F′, with their valves, H H′ and I I′, and central partition, J, when the same are combined, and a blast of air is obtained substantially in the manner and for the purpose described.

Improved Saw File.—J. S. Tripp, of Danby, N. Y.: I claim the specific device described for beveling the tooth of the saw, namely—the angle, I, the projections, O O, and the pin, K, attached and operated as described.

Improved Head Gear for Stopping Runaway-Horses.—D. G. Fletcher (assignor to himself and Heinrich Soltmann), of New York city: I claim the combination of the blinders, *g*, compression pads, *o*, sliding rod, *r*, and inclines with the check-rein, *h*, *m*, and collar, *i*, substantially as set forth.

April 24. Improved Bench Vise.—L. A. Beardsly, of South Edmeston, N. Y.: I claim the arrangement and combination of the pivoted jaws, A, hinged arms, B, guide bar, E, recess, *c*, right and left screw, D, and ring, *b*, as and for the purpose shown and described.

Improvement in Harness Pad.—James Ives, of Mount Carmel, Conn.: I claim, first—In the construction of a harness pad, detached from the tree or housing, the combination with the perforated pad plate, A, of a U-shaped washer plate, B, which has rivets or hooks formed on it, and is arranged within the pad and below the perforated pad-plate, substantially as and for the purposes set forth.

Second—Confining the back-band loops in position, by combining it with a detached T-bolt, F, of the pad-plate, A, substantially as and for the purposes set forth.

Third—Closing up and confining one end of the pad by the combined agency of the back-band loop, G, and the T-bolt, F, substantially as and for the purposes set forth.

Fourth—Providing the cap, G, with a band or loop, *f*, and with lugs, *d d*, and using it in combination with a tree, B, which has shoulders, *e e*, formed on it substantially in the manner and for the purposes described.

April 31. Improvement in Machines for Bending Fellies.—Arthur Hemminway, of Cleveland, Ohio: I claim the combination of the gripe, Fig. 6, screw hooks, N, and the adjusting plate, T, provided with hooks, M, when arranged in relation to the forming block, and acting conjointly in the manner and for the purpose set forth.

Re-Issue.—Improvement in Casting Boxes for Wheel Hubs (patented Dec. 7, 1852)—Thomas Ellis, and Wm. A. Ellis (assignees of Thos. Ellis), of Philadelphia, Pa.: We claim supporting the sand core, E, between two sand heads, F, or their equivalents, when used in combination with a chamber, D, of uniform taper, in the manner and for the purpose substantially as set forth.

May 8. Improvement in Hame Tugs.—Jacobs Hovey, of Bedford, Mich.: I claim the combination and arrangement of the box, A, spring, B, pin, *a*, slide, C, tug, D, and sliding-loop, E; the loop being made adjustable from the box, so that the back and belly straps will have an automatic adjustment; the several parts being connected and used substantially as and for the purpose specified.

Improvement in making Axle-Boxes.—A. E. Smith, of Bronxville, N. Y.: I claim a new and useful improvement in the manufacture of malleable iron axle-boxes, by means of the operations described, and for the purpose of producing an article cheaper, more expeditiously, and of a better and more useful kind than heretofore known.

Improvement in Dumping Wagons.—G. W. Tolhwest and D. C. Sartwell, of Liverpool, Ohio: We claim the combination of the adjustable partitions, L L L L sliding cross-piece, D D D D, and side leaders or connections H H H H; the whole being arranged and combined for operation as described and set forth, not confining ourselves to the number or size of the compartments which contain the manure.

May 15. Improvement in Axle-Boxes.—H. L. Castile, of Memphis, Tenn: I claim the employment of the cone-sided block, G, having the base resting upon the journal, B, in combination with the inclined-sided seat, A, as shown and described, so that a space, J, will be left between the upper part of the block, G, and the seat, A, and the fibers of the block will be laterally compressed, all as set forth.

Machine for Cutting Tenons on Spoke.—Mahlon Gregg, of Philadelphia, Pa. (Additional improvement on that patented by him Feb. 9, 1858): I claim operating the carrier, B, and bearer, C, upon the face plate, A, by means of the eccentrics, *f* and *g*; the same being constructed and arranged together substantially in the manner and for the purpose specified.

I also claim adjustably securing the cutter pieces, D D, by means of the nutted T-bolt, E, when the same are arranged and applied together in relation to each other and the carrier, B, in the manner described and set forth.

May 22. Improvement in Shortening Tire.—Abraham Vorhees, of Grand Rapids, Michigan: I claim the arrangement of the clamping bars, C H, short clamping anvil block, K, and detached lever or slide, L, working between guides, F G, as set forth, for the purpose of clamping and upsetting or shortening wagon tires, as described and represented.

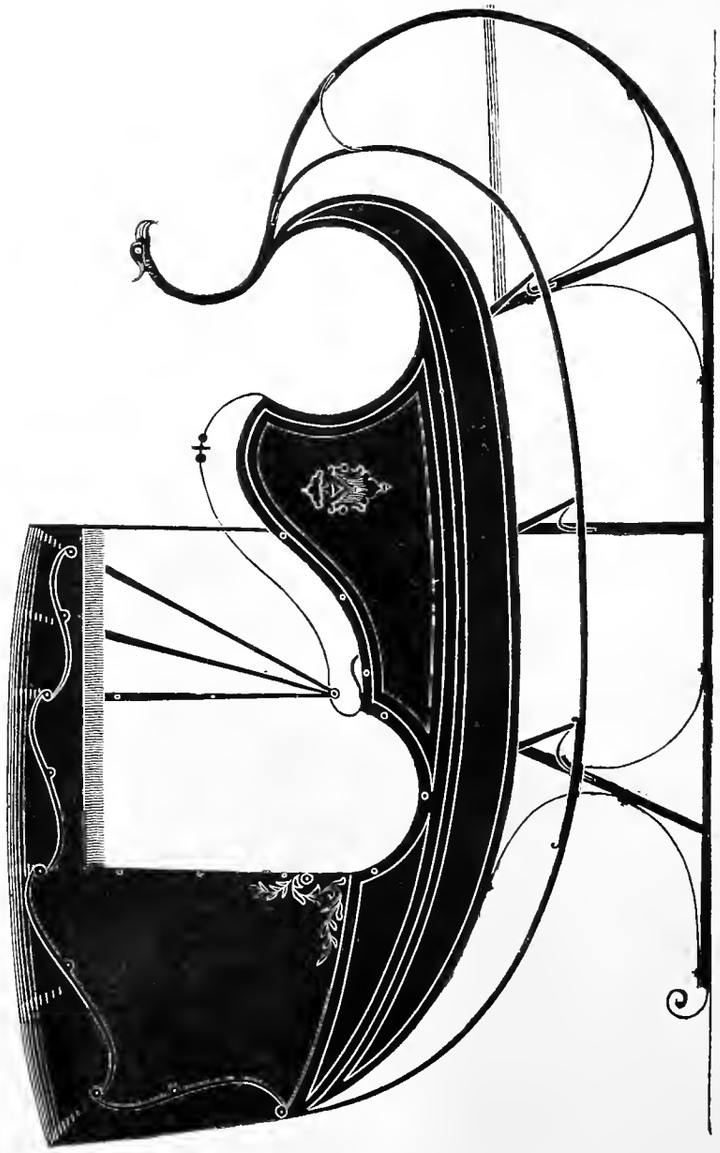
May 29. Improvement in Machines for Pincking Curled Hair.—Wm. Adamson, of Philadelphia, Pa.: I claim the employment of a brush feed roller, made as shown and described, whether used in connection with another brush cylinder or feed roller, or in connection with plain or fluted rollers, for the purposes set forth.

Improvement in Shrinking Tire.—S. S. Greene, of Rome, N. Y.: I claim the arrangement, as shown and described, of the jointed arms, B C, jaws, D D, rod, J, lever, F, and vice, G, for the purpose set forth.

Improvement in Cooling and Setting Tire.—Permin Kopfer, of Fond du Lac, Wis.: I claim the described cistern and revolving platform, the former being provided with a series of inclined planes, and the latter with a corresponding series of rollers; the whole being constructed, arranged and operated, substantially as set forth, for the purpose specified.

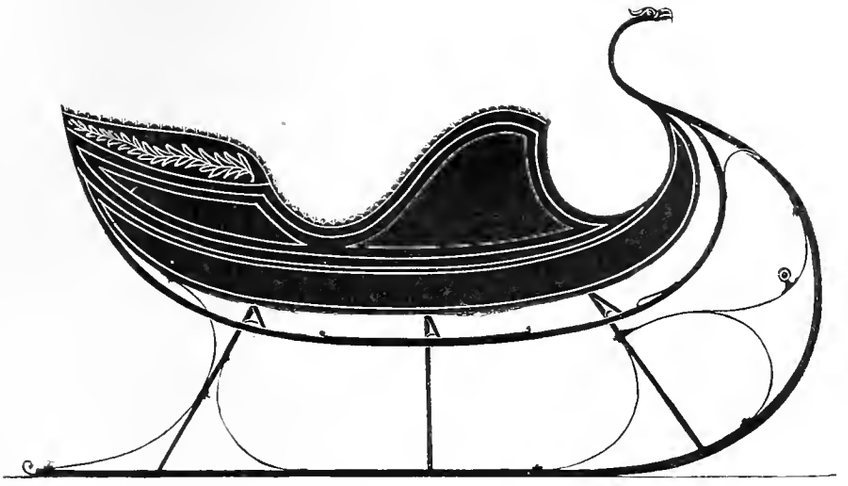
June 19. Improvement in Upsetting Tires.—Henry Barringer, of Wataga, Ill.: I claim the combination of the movable segment clamping lever, D, rocking-piece, F, block, G, and clamping portion, H, when arranged in a manner to produce the result set forth.

Improvement in Adjustable Carriage Seats.—J. L. Vansant, of Red Lyon, Del.: I claim the combination of the hinges, knuckle and slotted legs, with the lever, shoes and ways described and shown by my drawings, as (and for the purposes) of self-adjusting carriage seats, composed wholly and in part of iron, or other suitable metal, or wood, as before set forth.



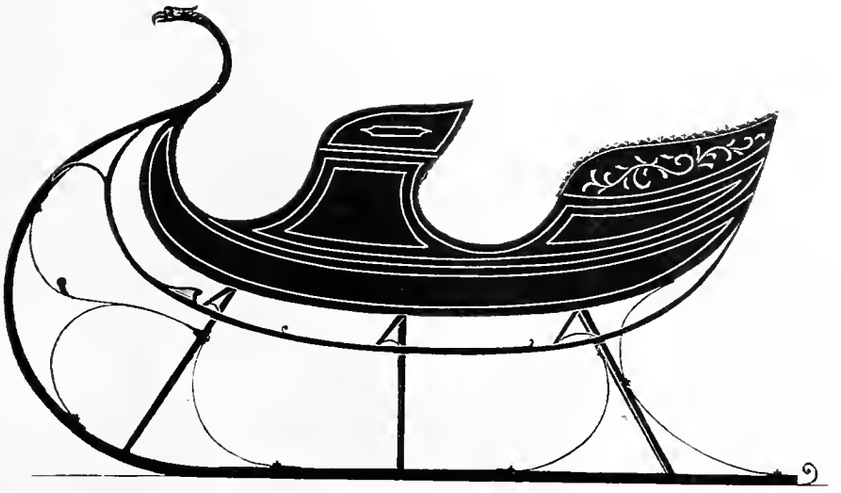
THREE-SEATED DOUBLE SLEIGH.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 68.



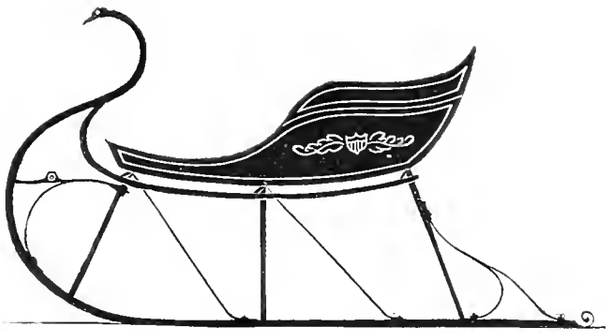
PONY SLEIGH.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 68.



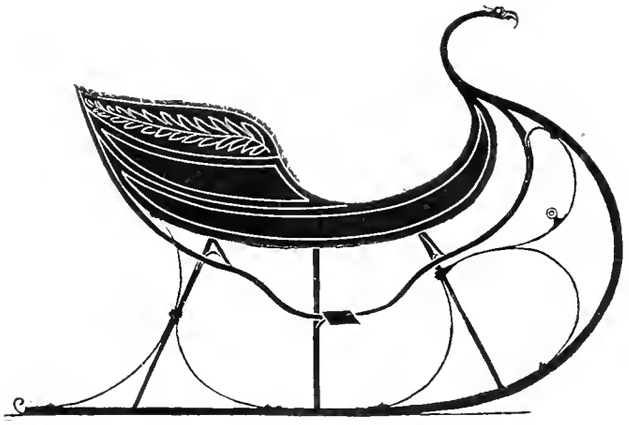
PONY SLEIGH.—½ IN. SCALE.

Engraved expressly for the New York Coach-makers' Magazine.—Explained on page 68.



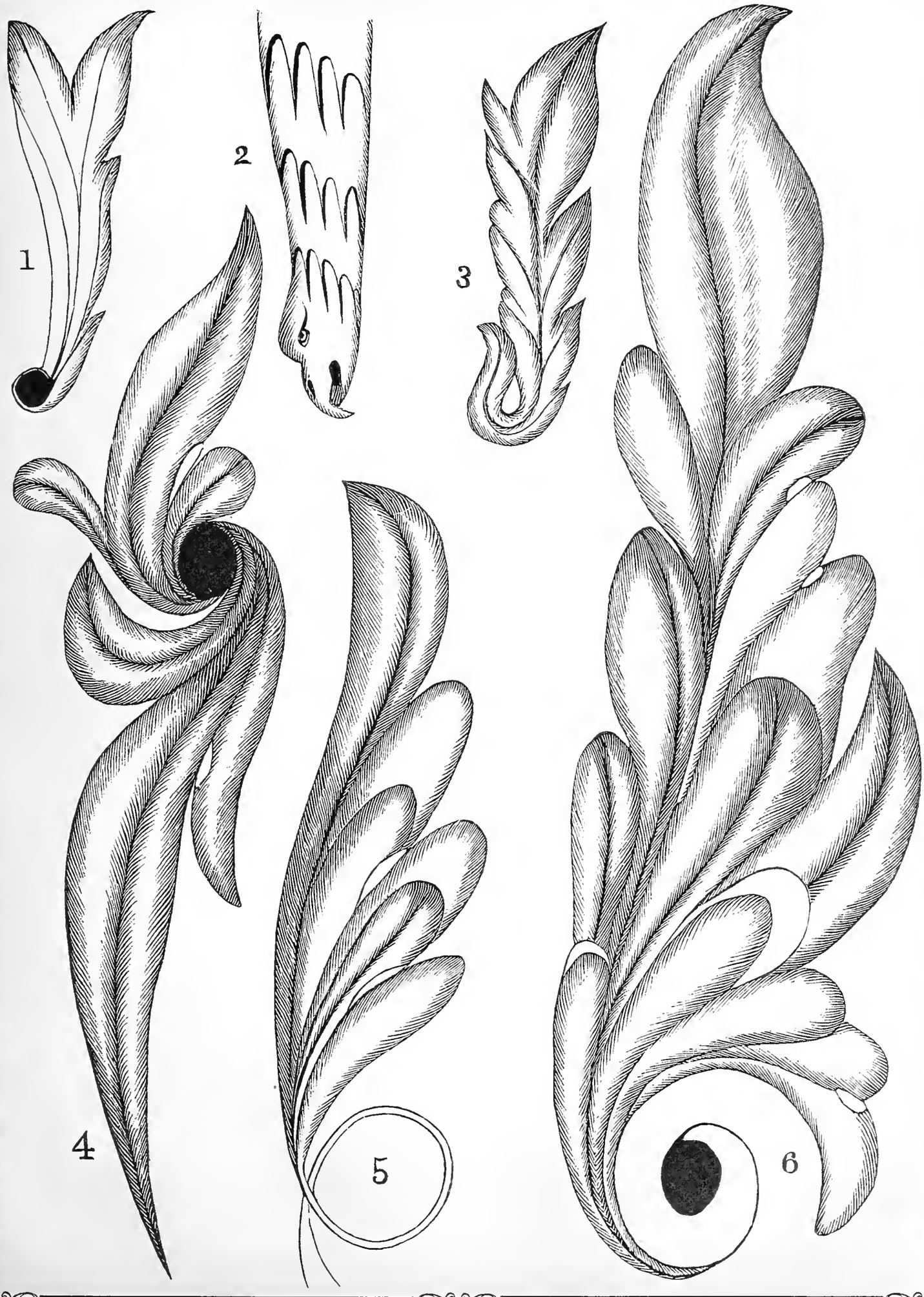
PORTLAND SLEIGH.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 68.



CUTTER SLEIGH.—½ IN. SCALE.

Engraved expressly for the New York Coach-makers' Magazine.—Explained on page 68.



DESIGNS FOR CARRIAGE-PART CARVING.—FULL SIZE.

Engraved expressly for the New York Coach-makers' Magazine.—Explained on page 68.

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, SEPTEMBER, 1860. No. 4.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

RAMBLES AROUND NEW YORK.

BY A COGITATING COACH-MAKER.

When I perceive how rapidly our Central Park is filling up with rides, drives, and all sorts of attractions, especially the moving throngs of happy visitors, I like to occasionally refreshen my memory (as well as my hopes) by thinking over the wonderful changes I have witnessed in the way of wheeling or sleighing, on or around this metropolitan island of Manhattan. What a panorama of the comic or the pathetic! Riding or walking, it sets an old Knickerbocker's head and heart thinking and throbbing like a Yankee schoolboy's, when he has just obtained a half-holiday and full liberty to go out. Buried up, as too many of us are, while riding in a railroad car, the avenues may well seem, especially to a stranger, nearly all alike; for little can be seen, and nothing learned of that instructive "million of facts" which *might* be told, without condescending to vulgarity, of interesting incidents between the Battery and Harlem Bridge.

Yes, I often elect myself as City Inspector without waiting to settle about the salary, and I hope Daniel E. Delavan has no objection, for I usually do my own wheeling, or else foot along with my ten-toed machine. The other day I took out, as a sort of companion during my ramble, a copy of good old Father Valentine's "City Manual," and it set my fore-boot cogitating and rushing about like one of Alexander B. Latta's steam carriages. Looking at the pay-roll in the City Inspector's department, I was glad to observe so many good judges of horses and carriages fraternally provided with safe little offices; but I strongly suspect that my enthusiastic friend, ex-alderman Wm. B. Drake, who holds the artistic appointment of "drawing diagrams of sunken lots," will soon find himself "high and dry" on a sinecure, if New York continues to improve as it has recently done.

Many persons can "talk like a book" about the twenty-one points of a horse, but when they take hold of carriages, we often observe an intellectual "smash up" among either owners or hirers. To consider carriages properly, we may as well borrow somewhat from that famously suggestive scientific method, said to have been already adopted in certain cookery books, by which, before proceeding to discuss "the best way to cook a hare," we are gravely advised, "first, catch your hare." This fashion of tracing the inductive or Baconian philosophy to some matter-of-fact source, has its recommendations, we do not doubt, so far as it goes. On similar principles, perhaps, we might say, before setting out the peculiarities of carriages, "first, get your carriage." This process of reasoning, however, does not go far enough with me. I should meet with but a comparatively small circle of readers if now addressing only the owners of carriages. But it is the interest of owners that *all* who have the temporary or permanent care of carriages should be well-informed upon the subject.

Since city railroads have come into fashion, I like to stand in front of Barnum's American Museum, where the Missouri of the Bowery mixes up east and west by descending into the debouching Mississippi of Broadway; and I like to watch the cars as they start from the Astor House for their respective avenues. With a sort of realized fancy, I follow each on its well-known track. An old cogitator like me need not travel far from that spot, sacred to the memory of spring water carts which had no springs, shilling omnibuses to Niblo's Garden, and the admirable "terrapin lunch" of the departed Sandy Welsh, but even yet occasionally enlivened by the indomitable travelers who pull up their fast trotters, and arrange their hickory wheels in the "vicinity" of Windust's. Yes, I can stand on the Museum (rounded) corner, and, following with my fancy, see the cars and stages "all on their winding way." Such of your readers, Mr. Editor, as may not happen to be New Yorkers, could, from that bustling spot, observe how much horse-flesh, leather, and wheels, to say nothing of drivers, are daily doing for our noble city.

While nearly facing the Astor House, we may observe how the lower part of Broadway now becomes a practical handle of the gridiron on New York's map of stage and car routes. Speaking of gridirons revives our appetitive reminiscences of the numerous and well-known "feeding" spots for "man or beast," which have been or may yet be found while on a tour up the North River side, and coming in on that of the East River, stopping

to recruit at the Farrish House in the Third avenue, where the worthy host and his amiable partner join us in wondering "what is to be done next" with Tompkins Market. *That* seems a question which would certainly puzzle Mr. Work's Odometer Band Company, and their machine for "measuring distances," although any Yankee house-mover would find the present edifice rather a tough job.

I perceive your June number has a picture of a "Budgaro." I am not able to answer your question of "What is it?" but I can say that the Bloomingdale Road has been (and is yet) the most unmistakable place to find specimens of almost every kind of craft that could "budge" at all on wheels. As for that four-in-hand phaeton your artist has so well illustrated in the same number, it has a natty English look about it, I must confess; but you ought to have seen an imitation of the Hungarian parast-posta (peasant's wagon) made by some German mechanics of New York about two or three years ago. I believe the design had been originally furnished by Count Maurice Sandor, of Hungary, and a sketch was brought to this country by Mr. Auguste Belmont, the "wealthy and distinguished banker." Be that as it may, the first time the New York concern hove in sight at Harry Arcularius' Four-Mile House, on the Third avenue, there was a party of critics came out that put me in mind of the crowd at Pete Bayard's on the Battery, whenever a fresh round of boiled corned beef was put on the lunch-table. As well as I could judge, the man who drove the Germanized parast-posta, with three horses abreast, had but a small chance for showing off with lavender colored kids. Drivers of Broadway stock, such as landaus, victorias, or bretts, prudently switched off on one side; people in tray-bottomed buggies began to think about the maxims of life-insurance, while our Teutonic and imperturbable friends went singing by, appearing like so many vertically-pickled herrings, or animated piles of Hingham pails. Just as our wonder began to subside, a certain well-known "hilarious" voice was heard to exclaim, "So much for lager bier."

Although I know of no superior style of carriage-work to that of our own country, we have many an "oddity" displayed on the avenues of New York. I have seen six horses, three abreast, driven with a vehicle that any one of the horses could have easily drawn. A phaeton with four cream-colored horses makes up a pretty picture, especially with gay company. About a year ago, a New York correspondent of the *Boston Journal* got off the following screed:—

"Among the novelties of snobism, is the four-horse team. A small open wagon, on the principle of a trotting wagon, is fitted up with two seats, intended to hold four persons, perched high up in the air, with a back to the seats four inches high, running all over with crinoline, holding two youngsters with tan-colored beards, and a short crop at that, with four horses (stage fashion) attached, and driven by said youngsters, may be seen daily in Fifth avenue and on the upper part of Broadway. The horses are not matched in color. The greater the variety the better. Such is the *ton* style, and it will be all the rage."

Perhaps, if this style of turnout had appeared in Harrison avenue, or on the Milldam, the Boston historian might have found a less offensive word than "snobism." New York has long been famous for bold and handy holders of "the ribbons" for a four-in-hand. In the days when the distance between Washington Hall (now Stewart's marble palace) and Cato's (now being cut up for building lots) used to be "done to a turn" by dashing young drivers in their own equipages, the ladies did not neglect to see them pass by, nor did our youthful aristocracy forget their favorite belles when the sleigh bells jingled upon the frosty air in winter. Harry Costar's four cropped sorrels,—ears, mane, and tail,—can never be forgotten by those who once saw him drive them. John Haggerty, Bruce Hunter, Ham. Wilkes, Wash. McLane, and Henry (Dandy) Marks, may serve to mention as specimens in a very similar half-dozen. In those days the Third avenue was not quite so "cut up" as at present, and Cato's, Harry Arcularius' Four-Mile House, Capt. Tom Starr's (now John Burke's) Five-Mile House, and so on, were as sure to be visited as that the four-horse stage went out on the old "Post Road to Boston."

Speaking of Harry Arcularius reminds me of the public opening of the Elm Park pleasure grounds during the early part of last summer. I can not help thinking that it was an important event in the history of our city and county. The public-spirited members of the Elm Park club had their formal commencement graced with the charming presence of a very fashionable assemblage of beautiful women nearly all endeared to sight by family name or individual virtues. Think of that! How could good men and patriotic citizens help feeling happy? There were about two hundred members in the original organization, and if I were to name them all as they deserve, my coach might get too much top hamper.

Just think of such dash-board dashers as Morgan L. Mott, the president; Wm. Waltermire, the vice; Col. James Walters, the secretary; or, George Little, the treasurer. There's a team! Do you see anything "little" in that crowd? Wonder if *they* know anything special about carriages or "drags" of any kind. I believe the directors were also just about "as they make 'em" around New York; and, if my memory is correct, were, Richard (Freezing Dick) T. Compton, Uncle John (Dad of George) Perrin, J. (firm on his pins) Post, D. O. (Cupid) Archer, and, of course, Peter (to wagon) Dubois.

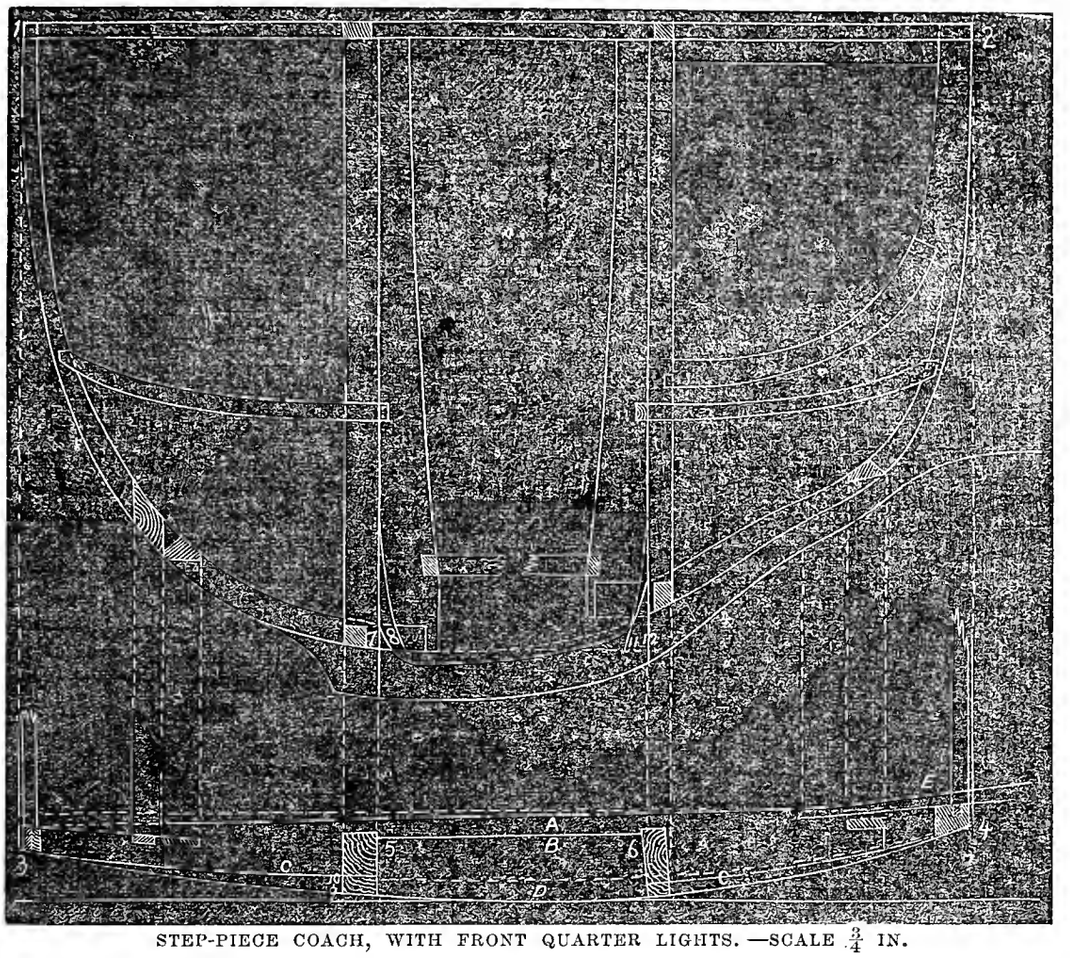
Speechifying was as plentiful as three-minute horses, with wagons for keeping shop with. Col. Jim, the secretary, showed that he could talk as well as write. J. Sherman (Big Indian) Brownell, spoke words of peace, and got off an extra lot of good things. Next time I saw "Old Sherm" was the day we went outside Sandy Hook, with a steamboat party, to see Judge Welsh off to Europe, and then the Big Indian talked to his little boy as well about steamboats as he had previously, at Elm Park, about carriages. Marshal (Empire) Rynders was one of the "original" two hundred, and, if his remarks at the formal opening of Elm Park were not original, then I shall have to sing in a school-house over again, or else adjourn over to Tom Shillingsworth's, near Newark, in search of mussel-pearls.

To my fancy, however, the public opening of Elm Park was the most worthy of notice from the large collection of carriages there and then grouped. There seemed a little of all sorts; some old acquaintances on the road, and some new articles. A few of the European affairs looked as if they might have been purchased at the auction sale ordered by the Emperor Publius Helvius Pertinax, about the year 194. Some of the modern American articles seemed as if ably designed to renew the accom-

modating glories of the Roman Emperor Commodus, whose carriages (so the historians say) were ventilated or closed, lighted or shaded, at will; besides being well furnished with talismanic odometers and chronometers.

Among the recent improvements might be observed specimens of Thomas Winans' bent-bar buggy; Wm. S. Lord's perch couplings; N. N. Selby's whiffle-trees; Alanson Quigley's pawl-and-catch carriage-tops; George Kenny's whiffle-trees; D. O. Macomber's omnibus; M. G. Hubbard's springs for side-spar wagons; new styles of O. B. North & Co.'s harness saddles, axle-boxes, and those of Wm H. Saunders, side by side; Daniel Freeman's Canadian carriage; John H. Gould's three-wheeled chaise, for children; Thomas Brownfield's wheels; T. J. Baughman's double-tongued wagons, with combination hounds, and such like objects likely to attract a coach-maker's attention, although these are only a few which occur to my mind at this present writing.

Before I pull up and go in "under the shed," allow me to say that many people, perhaps not exactly coach-makers, nor so confined for time as such hard-working philosophers, would do well to "take a sight," present or retrospective, on any of our main avenues. Impossible to go wrong. All have some attraction or distinctive features. Ask Commodore Vanderbilt, or any of his charming family. Politics may rage, but Mayor Wood and Mayor Tiemann "jog along," side by side, or meet "on the road" with friendly greetings, and even their horses seem to exchange looks of pride in their respective equipages. For my part I cannot help thinking that carriage making is the great civilizer of our highways and by-ways. See your brother editor, Robert Bonner, and observe the style in which he drives Lantern and Light, the pair of splendid horses he purchased of Col. Joseph Hall. Hark, how the youthful Bonners laugh and almost crow, as the speed of the fast quadrupeds causes the inmates of the carriage to inhale the spirit-stirring breeze. Observe the "tasty teams," sometimes four in hand and four to ride; not forgetting the rosy cheeks, bright eyes, and swelling crinoline. Then the ruminating doctor, in his bonnet-poke chaise. Next the lawyer, free from the close air of the courts, whizzing the kinks out of his brain by getting into a good carriage behind a horse that *can* leave "everything" behind, if required. But, I must stop, and get you to examine the throat-latch before I make another dash at a "ramble."



STEP-PIECE COACH, WITH FRONT QUARTER LIGHTS. —SCALE $\frac{3}{4}$ IN.

ENGLISH CARRIAGE ARCHITECTURE.—NO. IV.

As in the former examples, take the extreme length of the body from 1 to 2, and lay it on the cant-board.

2. Lay down the cant-rail line, as shown on the cant from 3 to 4.

3. Next, lay down the width of the door, as shown on the cant lower figures 5 and 6.

4. Determine on the amount of turn-under for the standing-pillar 7 to 8, as shown on the body.

5. Lay down the distance from the cant-rail line inwards 9 to 10, as shown on the body 7 to 8, as this must be the same as the turn-under of the body.

6. Draw a perfect sweep from 3, touching at 6, and continue it to 4.

7. To get the proper turn-under of the standing-pillar, draw a parallel line, as shown on the body from 8 to 11; then lay it down the same distance as from 11 to 12, as shown from 7 to 8; this will give the distance the standing and front pillar requires to be framed inwards from the cant-rail line.

8. The dotted line 8 to 11 shows the bottom of the glass frame in the door.—*Carriage-Builder's Art Journal.*

CHARIOTS *vs.* WAGONS, 1744.—In a note to Lady Hervey's Letters, we are told that light bodied chariots were advertised at this time, "fit either for town or country—carriages on springs beginning then to supersede the wagon-like coaches of former days." This was about the period of the introduction of turn-pike roads, which effected a great change in the mode of travel in England.

For the New York Coach-maker's Magazine.

DESCRIPTION OF MESSRS. HOLMES' CARRIAGE-MANUFACTORY, DERBY, ENGLAND.

(*Concluded from page* 43.)

AT the opposite corner of the carriage-room is another small room containing a paint-mill, which is used for grinding paint for first coats. It grinds by steam power, and is differently constructed from any American mills. All idleness and lazy habits are strictly prohibited, but workmen are in no way stinted to the time they must take to do their work, so long as it is done well and they keep themselves at work upon it all the time. Every man upon the premises is furnished with a small slate with his name painted upon it, and upon this he writes his time and specifies what work he has been engaged upon during the day. The paint-rooms are superintended by a gentleman whose time is wholly employed with painting heraldry, and whose beautiful workmanship would annihilate the performances of some would-be heraldic painters. All new work is "hung up" in lead color, and filled with workmen; a span of fine horses attached are driven at a 2-40 rate, through those streets macadamized, which fully tests every part of a vehicle.

If we wish to know the kind of customers the firm works for, we pass to one end of the body-paint room, and see rows of spokes used as paint-patterns. On inspection we find the names of the owner of the vehicle to be painted from the pattern, neatly painted at one end of the spoke. Among them appear baronets, viscounts, lords, dukes, and princes, both English and foreign, some of them the greatest notabilities of the present age. The few weeks I was upon the premises, the firm dispatched a beautiful Brougham to one of the Rothschilds, of Paris; one of the Queen's state carriages (a chariot) came down from London to be entirely renovated; with work in the paint-shop for the late Duke of Devonshire, Sir Joseph Paxton, and other distinguished men I fail to remember; but this is a fair sample, for none but the wealthy are able to foot the bills which are charged by this firm.

It is now many years since I read an advertisement in the local papers, stating that "The public were respectfully invited to inspect a carriage just completed for her Majesty the Queen." This has been repeated several times since then, and a portion of the Royal family, comprising Prince Albert, Prince of Wales and suite, have inspected and gone through the whole premises. England's future King has skipped out of one carriage into another, giving *his* opinion of the different styles inspected, and upon leaving they expressed themselves as being "highly gratified at finding everything so clean and well regulated, especially as the visit was unexpected"—for the visit was not expected at that time—and the firm had not made any preparations to receive their royal patrons; but as they left the premises, an abundance of the good things of this world made their appearance, and master and workmen vied with each other to honor the event—for honor it was of no mean proportion.

A certain discipline is voluntarily enacted upon the premises, which tends to discourage that disgraceful use of language which is so common in a great many shops. The men work harmoniously together, and apprentices not only speak respectfully to journeymen, but the younger boys have and show a certain regard for the elder. They are not allowed to associate with journeymen until they have passed their 20th year. There is none of that vulgarity and profanity between boys and men which is so common in a great many shops. The firm did employ some 10 or 12 painters, with 3 or 4 rubbers, and as many apprentices. The average pay of the painters would be about 6½ dollars per week, some having 5½ and others 6½ and 7½ dollars; body-makers, trimmers, and blacksmiths from 6 to 10 dollars per week, according to qualifications. This looks small to American workmen, but I question whether these men are not better off with this pay than we are upon this side of the water with double the amount. Good brick tenements, with from 4 to 7 rooms in them, can be had for from 62 cents to one dollar per week; and by a walk of one and a half or two miles, they may enjoy suburban cottages, with enough land to them to produce vegetables for a large family the year round, for a less sum. It is seldom known for two families to occupy one house. For 2½ dollars a pair of boots may be bought which will last longer than our "brown paper" goods are intended to last. For 5 dollars a good West of England cloth coat can be bought which will have durability in it, instead of fancy stitching. Every common necessity can be had at the same proportionate cost. A majority of the men are banded together in Odd Fellowship, money clubs, land and building societies, and other good institutions for which English mechanics are noted. Small as their pay appears, by frugality, industry and perseverance, a great many of them become their own landlords. With paying from 50 cents to 1 dollar per week into land and building societies, they become possessed of building lots with good brick tenements upon them, which once constructed are no apology for what they are intended to represent.

Both at work as shop-mates, and in their local relations as fellow-townsmen, there is none of that bitter jealousy and those antagonistic disputes which so often take place in our shops, where so many nationalities are brought in conjunction with each other. If local or national questions are discussed, public opinion, in a great measure, goes one way. Should "the flag that's braved a thousand years" require the sympathy and condolence of the masses, it is given with a good will, and there is no "foreigner" there to dispute it. Should there be occasion for public rejoicing, all hands join in and vie with each other who shall confer most honor—where honor *is* due.

If anything is wanting to proclaim the character of this firm, it would only be to mention the length of time some of their workmen have been in their service. Some four or five years ago there were two men who had been with them half a century, with several more who had served their apprenticeship with the father of the present firm, and had never worked for any other, and whose gray hairs and infirm step were a sure sign that their best days had gone. There must be several others, by this time, whose "golden" period of life has been spent in the service of this firm. We may take the men in the paint-shop as a fair sample of the whole premises. The gentleman that has charge of the paint rooms, also the man that has the name of being the foreman of the carriage paint-room—I say, has the name of it, because he has arrived at that age when men take but little interest in painting or any other occupation; both these gentlemen learned their trade with the forwarder of the present firm. The last man employed had been over 4 years, the next to him over 8 years, and the remainder—some 8 or 9 men—had learned

their trade with the present firm, and had been with them from 10 to 20 years. I am referring to five years ago, but I suppose the same old faces are still to be seen.

A great many have been over 25 years with them, and I run no risk in asserting that over two-thirds of the men now employed by them have been over 10 years in their employ. It is uncertain work, waiting for a chance in this factory, as it often happens that a strange hand is not employed in some branches for a year—it may be for years.

Although filling what appears to be permanent situations, I am proud to say all employed upon the premises, who are eligible, are members of the "United Kingdom Society of Coach-makers," and are ever jealous of its prosperity and welfare; a fact I would particularly impress upon the mind of the American reader. The sympathy and good fellowship that exists between employer and employe in this establishment is worthy of all commendation. There is not a man upon the ground that would not put himself to great inconvenience to oblige his employers. Once every year, an annual dinner is given by the firm to their workmen; a large public hall is hired, and a repast is served in such a style that it reflects honor and credit upon the providers. Be assured there is no lack of English roast beef, with plenty of "good hold Hinglish hale," with a sufficient quantity of "ops" in it. Members of the firm preside, who freely discuss (a great many would call them office secrets) the business of the past year and the expectations of the year to come. Song and sentiment is the order of the evening, sociability and conviviality reigning supreme. If my memory serves me, the senior member of the firm wished to locate—with the money spent in this annual dinner—a library and reading-room upon the premises for the use of the men; but the younger member—who is one of those whole-souled, generous men that at once captivates and enlists the friendship and esteem of a stranger—demurred against the proposition, and was not willing that these time-honored sociable gatherings should be so abruptly done away with.

During the few weeks I worked for them, they were finishing a large government contract (ambulance wagons for the army, then engaged in the Eastern war), which compelled a number of men to work two hours' overwork each evening, at the expiration of which, the night-watchman was directed to supply each man with two "horns" of ale. Although these gentlemen have as great an abhorence of intemperance as any of our Maine-law legislative agitators, still their good common sense does not prevent them allowing, and even countenancing, the absorption of a moderate quantity of England's national beverage. Should domestic affliction or bodily infirmities overtake these workmen, they always find sympathetic and consoling friends, both in their employers and fellow-workmen. They are visited by both, their wants inquired into, and should material aid be wanting—which is but seldom the case—it is cheerfully contributed. I mention these little facts, which, though small in themselves, have so great a tendency to make a laboring man's lot cheerful and contented. A man works with a far better heart and spirit when he knows his labors are appreciated, and especially when he is sure that those he works for take an interest in his condition and welfare.

The prosperity of this firm is a fine illustration of what may be accomplished by industry, integrity, and perseverance. Some fifty to seventy years ago, the original of the firm was doing, comparatively speaking, but a moderate business, while the original of the firm I learnt my trade with were in great prosperity. But what are their relative positions now? These gentlemen, by doing all that is good and honorable, both to themselves, their workmen, and patrons, have earned a world-wide reputation as coach-builders—are honored and beloved by their employes, as good masters, and, judging from the positions they hold in the community, fully enjoy the confidence of their fellow-townsmen; while the latter firm, though carrying on business, scarce employ a single representative of each branch, and, at times, are almost reduced to penury. It is generally admitted by Americans, that the French excel the English, and Americans the French, in carriage-construction. I am not much surprised at this decision—for if we take the vehicles which visitors bring over from England as a fair sample of English carriages, they would corroborate the supposition. Those exported from England, and imported to America, are brought over because they are English—thoroughly English. They are not bought for their beautiful symmetry and elegant designs, but because they are mere sugar-boxes stuck upon wheels, and look more eccentric and different from the common build of carriages in this country, and allow the owners to put on "foreign airs," as they drive through the Broadways and Washington streets of this country. But the beautiful carriage-work manufactured by the Messrs. Holmes will bear a very favorable comparison with work made in any country in the world. There is no other firm I can think of, that employs better talent, and which is more capable of refuting this "Yankee notion," than this firm. A scale draughtsman *was*, and no doubt *is*, now wholly employed by them, whose beautiful, cleanly-finished work did not escape my admiring observation. Englishmen are allowed to be a little "pig-headed" and prejudiced in anything that involves an international question, and I have to acknowledge myself as belonging to that class, in this particular case; thinking, as I do, that English carriage-making is brought as near perfection with regard to style, lightness of construction, in conformity with durability, as any other carriage-making in any other country. To back up this assertion, I would respectfully invite the Messrs. Holmes to post the editor a few of those beautiful scale-draughts (for publication in this magazine) which lie so profusely around their offices and show-rooms. By so doing, they will oblige the writer, and confer a favor upon the editor, which will be highly appreciated by the coach-makers of this, the largest carriage manufacturing and destroying country in the world.

I may add that the whole premises are always open to the inspection of strangers; a privilege that is often enjoyed by both English and foreign travelers who may pass through the town. Civil and gentlemanly clerks are always in attendance to conduct strangers through the workshops and show-rooms; and from the well-known politeness of the proprietors, I will insure every stranger a respectful reception, and especially if that stranger should be one of "our American cousins."

It will afford a sweeter happiness in the hour of death to have wiped one tear from the cheek of sorrow, than to have ruled an empire.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACHMAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

III.

THE charm of convivial society drew me into the country very often, to the sad neglect of my books. Nearly every Sunday, when pleasant, we would ride out, and attend church in the neighborhood where the three sisters resided. It was a pleasant country church, painted white, with green blinds to the long windows, and situated on a gentle knoll in an old wood, with great trees standing around, stretching out their long arms and looking down like so many guardians upon it.

We know of nothing more delightful than to see a whole neighborhood assembled together on a pleasant Sunday in some modest forest chapel, and uniting their voices together in praise to the Great Giver of all. There is nothing better calculated to turn the frivolous thoughts of youth in a serious channel, and bid the mind lift itself above the world, with its cares and troubles, to that blissful sphere where we all hope to dwell after "life's fitful fever." The skeptic can but admire the humble, heartfelt offerings which are here laid upon the altar of Christian devotion, while the incense rises to heaven in low-breathed prayer and melodious hymn. Not in the crowded city, amid the proud throng of a fashionable congregation, would we worship, where every sentence is weighed out to fastidious ears like so much merchandise, for which the preacher is to receive its equivalent in cash; but here, in "God's first temples," where the volume of Nature lies open before us, with immutable truths traced by the finger of God on every page—where green leaves and fragrant flowers speak to us of love, while the leaping rills, and gentle zephyrs, and beautiful birds sing to us the anthems of praise. We never entered that forest chapel, and listened to the words of the aged minister, without thinking of Goldsmith's picture, in the "Deserted Village," of the country parson, "passing rich on forty pounds a year,"—without feeling better for it.

After service we usually received half a dozen invitations, from as many different persons, to accompany them home for dinner; all given in the old-fashioned, honest way, so that one may know he would be heartily welcome. Sometimes we would accept their kind invitations, and whenever we did so, we always had a delightful time. My first acquaintances were not neglected, and as I became more intimate with them I enjoyed their society better and better. My conversation was generally directed to Lizzie, for I loved to hear her talk. There was something sad and melancholy about her that just suited my nature. In time I endeavored to learn the cause of her sorrow, but she always remained cold and reserved, only hinting occasionally about some great weight that was crushing the life from her young heart. It did not require a great length of time for me to discover that she was a girl of talent. Her ideas upon the social system of the day were original and piquant, and, if opposed, she would argue her case with great obstinacy, displaying a strong, vigorous intellect, and so boldly as to startle me at first, as she presented new principles of reformation that were a hundred years ahead of the time.

Sometimes she would suddenly stop denouncing evils of the present system, and picture a small island in the Southern Seas, with ever-blooming flowers and never-fading verdure, and she would populate it with an ideal race of her own, with her principles and her views. There was a strange fascination about her manner, and the island as she presented it took the form of Paradise, with songs and scenes and fragrant winds that would intoxicate the senses.

After dinner, we would usually pass the time out under the two great sycamore-trees that stood in the door-yard, around the huge trunks of which rustic seats had been erected. There we would sit or recline lazily on the velvet sward, and listen to Mr. Worthington's odd expressions, as he related adventures of his younger days, when living in the "Old Dominion," or else wander off through the woods we have before described.

Willingly would we linger here in the pleasant society of our fair friends, but other things of greater import to our history demand our attention.

How easy it is to sit down in our easy-chair and detect the great errors we have committed. My life has been far from perfect in this respect; and here let me record my first act of folly.

The body-maker, Bill, whom we have heretofore noticed, believing in the old adage, "the fools are not all dead," conceived the idea of inventing a coupling, which idea worked itself out in a living reality, and was duly patented in the course of time. Whether it was a valuable invention or no, I will not stop to discuss; enough to know that it presented sufficient claims to the useful and profitable to induce the boss to take an interest in it, and after much persuasion I consented to start out selling rights. After putting up a buggy with the new coupling attached, and buying a fine young horse, I engaged Mr. Worthington to accompany me. On his *forte* of talking I depended principally for success, and it was arranged between us that I should break the ice by explaining the principle of the invention, then he was to "pitch in" and sell it. If he failed to sell, after talking himself out of breath, I was to wind up by falling a little in the price, and as the whole programme would occupy at least three hours, we concluded if any man could be found who would refuse to purchase it, after its utility and value were thus set forth, why, he might go. We thought most men would buy before the three hours were up, just to get rid of us.

We started out in fine style. Our horse was "extra Kentucky blood," silver-mounted harness, New York buggy with leather top, carved carriage-part, silver plated, richly ornamented—in a word, we "cut a dash" as we went flying up the main street in Greenfield. Arriving at the territory assigned us, we soon found a carriage shop, and as the proprietor was a merchant in the village, we concluded there was a good chance to sell. Driving up to his store, I called him out, and told him in the politest manner possible that I had a very important and invaluable invention which I wished to show him; then I explained the principle on which it worked, its superiority over other couplings, to all of which he listened with marked attention, and I flattered myself that I had won half the battle. We then took a short ride, to see how nicely it worked, turning round in a very short space, and finally, after offering him the right for his shop at the remarkably low figure of fifty dollars—*cheaper than any I*

had yet sold—as he did not seem inclined to *bite* quite as readily as I imagined, I turned him over to the tender mercies of my partner. "Ahem! The most illiterate, sir," he commenced, after depositing a fresh quid of tobacco in his mouth—"the most illiterate, sir, will perceive at a single glance the various advantages combined in this ingenious invention over the old-fashioned, as well as all other patent couplings. First, sir, one of the most provoking occurrences of a woman's whole existence is in soiling a new dress by having it come in contact with a muddy wheel, either by getting in or out of a buggy; and it is here rendered impossible; for, as you see, by turning the wheel in one direction the body is thrown in another, and thus the dear creatures can get in and out without damaging a particle of silk or satin, or without contracting the dimensions of their crinoline. This, sir, I consider to be one of the greatest advantages of this invention, and I do not believe there is a gentleman in the country, particularly if he is young and has a good-looking wife, but would willingly pay ten dollars extra for a buggy with this improvement, for it would save them many a cross look and sharp word."

After presenting a number of arguments like the above, all worded in such a way as to make a person who knew but little about carriage-making think there really was something in them, he closed by hinting in a delicate manner that he was ready to dispose of the right. But the gentleman seemed in no hurry about buying—in fact, he thought he would wait a while—and as Mr. Worthington seemed almost talked out, I stepped forward and took his place. In order to present still greater inducements to purchase, I most graciously fell to forty dollars, assuring our would-be customer that it was marvelously cheap—cheaper than I had any authority to sell—nevertheless I would assume the responsibility in this case. It all seemed of no avail: muttering some paltry excuse, he started to re-enter his store, and giving it up as a bad job, I got in the buggy, when Worthington resolutely stepped forward, with a look that seemed to say, "Old fellow, I'm not going to give you up so," and placing his hand on the merchant's shoulders as familiarly as though an old friend, he said, in a tone of affecting seriousness, "Now, sir, I'll tell you what I'll do: I'll sell *you* a shop right of that invention for *ten dollars*."

This was too much for the weak nerves of the merchant—falling from forty dollars, "the very lowest," down to ten at a single jump—and giving one earnest look, as though doubting his own senses, he struck a bee-line for his ledger and day-book, while Worthington stood motionless as a statue, looking after his retreating form until it vanished behind the counter. Slowly turning toward me, he gave one of his indescribable looks, then, revolving his quid in his mouth, he muttered in his dryest manner, "Well, I s'pose he imagines himself to be very smart; in fact, if *he* had the *measurin'* of it, GEN. WASHINGTON'S great overcoat wouldn't make him the fore-part of a vest." Leaning back in the seat, I enjoyed a hearty laugh at the *serio-comico* ludicrousness of the scene.

On our way to the next village, Worthington declared that if he could only get a glass or two of ale, he'd talk the boss to death before he'd let him off without purchasing. Arriving in town, we stopped at a saloon, and after *smiling* we proceeded to the carriage shop. Having found the proprietor, I performed my part of the programme, making, as I thought, a good impression, when I fell back and let my partner commence operations. With desperate energy he went at it, presenting the advantages and good qualities such as his fertile genius alone could have thought of, and in such eloquent style, too, that I thought his subject was listening more for the sake of hearing him talk than for the knowledge to be derived therefrom. Leaving him to finish the battle alone, I went up to the hotel, and joining the landlord, was soon engaged in a familiar conversation with him. Nearly two hours passed away before Worthington arrived, and then he looked as though he had just passed through an engagement with the Camanches. Taking a seat by my side, he whispered hoarsely, "Well, I got him." "You don't say, though! For how much?" I inquired with some anxiety. "Sold him a shop right for *five dollars*—hung on to ten for a long while, but had to slip—better than nothin', though!" and we took another glass of ale over the event.

Although we could not effect sales readily, we had a goodly amount of fun. With every boss we found we'd offer to trade for buggies, horses, harness, watches, shotguns, rifles, and on one occasion Worthington went so far as to tell them to bring out their "yaller dogs" and "old clo's."

At one town we traded the county for an *old* buggy—emphasize the adjective—and ten dollars; but as the last-named consideration was only an imaginary article with the boss, we took his note, payable "one day after date." Taking it to a neighboring store, I presented it to the merchant, and requested him to shave it. Looking at me pretty sharply, he said, "Guess you must be a stranger hereabouts. Wouldn't give you over five cents on the dollar for it; can buy plenty of his paper for ten, on time." I waited to hear no more. I suppose that buggy is standing there yet, unless it has rotted down.

Had we the time, we might relate many more rather laughable incidents connected with our trip, not only in selling, or trying to sell, rights, but in the exploits of Worthington in getting acquainted with the ladies along our route. Generally it took him from "fifteen to forty minutes," as he expressed it, to work his way from the bar-room to the parlor, where he would ingratiate himself in the good graces of the landlady and her daughters in a brief period. He would often rally me on my bashfulness, and wind up with a brief exhortation like this: "'You want *impudence*, sir—that's it, good cool impudence—and unless you've got it, there's no use in travelin' through this wooden country. It's just as impossible to get along smoothly without it, as it is for a shad to climb a barber's pole, tail foremost, with a loaf of bread in his mouth."

After a six-weeks trip, we returned to Greenfield, presenting a different appearance from our departure. Our horse was reduced in flesh, the harness had lost its gloss, the sun had drawn the top out of shape, while we looked like young savages from the plains, with long hair and unshaven faces.

We cast up accounts with the following result:

Expenses, - - - -		$60 00
Am't received.—Cash, - -	$5 00	
Ten-dollar note, 95 p. ct. discount,	0 50	
One second-hand buggy, -	0 00	
One old watch that wouldn't go, only when carried—true value,	1 75	
Total, - - - - -		7 25
Balance out of pocket, - -		$52 75

Thus ended my first folly.

For two weeks I tried to work, but found it of no use, so I gave it up in despair. I was down-hearted and discouraged. After much thought on the subject, I determined to proceed farther west. As I had a desire to see the country, and proceed at my leisure, I concluded to travel in my own conveyance.

After passing a few days among my country friends, I bade them all farewell, and, returning to town, prepared for my departure. As I felt a decided aversion to traveling alone, I easily persuaded Mr. Worthington to accompany me as far as Central Illinois.

(*To be continued.*)

Pen Illustrations of the Drafts.

For the New York Coach-maker's Magazine.

THREE-SEATED DOUBLE SLEIGH.

Illustrated on Plate XII.

BINGHAMTON, N. Y., 1860.

MR. EDITOR,—You will please find inclosed a drawing of a three-seated double sleigh, drawn $\frac{1}{2}$ in. to the foot. It is to have a close plated silver rail, with a collar—the rail to be $\frac{1}{2}$ in. or $\frac{9}{16}$ in thickness. Between this rail and the front belt is an open space. This kind of sleigh tracks 3 ft. 3 in.; not less than this, nor over 3 ft. 4 in. As to the style of painting, everybody have their own tastes. This will look very well with the under part painted vermillion, the body panels lake, and the front belt and arm-piece a dark bottle-green, striped in gilt $\frac{3}{16}$ of an inch wide, with hair stripes on each side of it. The wings (not shown) should be 12 inches wide; the butt starting directly back of the head, and sweeping around with the neck to where the body-raves connect, and then around with the raves to within 2 or 3 inches of the front beam. The bottom-sides should be 5 inches wide, and placed 3 feet apart on the top of the beams. The beams should be 5 feet 2 inches long outside of fenders. The side-swell may be 6 or 8 inches, according to fancy. The back and arms should be trimmed with plush, and finished with $\frac{1}{2}$-inch angle-moulding. The prices of these sleighs range from $200 to $300. Yours truly,

FRENCH, SPAULDING & SHEPLEY.

For the New York Coach-maker's Magazine.

PONY SLEIGHS.

Illustrated on Plate XIII.

MR. EDITOR,—I send you drawings representing pony sleighs of two patterns, drawn $\frac{1}{2}$ inch to the foot. One is after the style of a three-seated double sleigh. Instead of having a seat, as these generally do, the arm-piece and belt form the side of the front seat. There is no back to the front seat, as you will see by the drawing. In getting up sleighs, the workman should have a good eye for the business, for in getting out "the formers" the sweeps must be true and easy. This class of work is different from coach work.

Sleighs should track from 3 ft. to 3 ft. 3 in. wide. In getting out my body-raves (bottom-sides) for pony sleighs, I bend a pair at a time. The front end of the rave I leave 6 inches wide, and the back end 9 inches, and $\frac{7}{8}$ or 1 inch in thickness. When bent, saw them apart, then you have a good chance for a swept back. Place your body-raves from 2 feet 8 inches to 2 feet 10 inches apart on the beams, giving them a side swell 7 or 8 inches. Paint the running part vermillion, the body lake, and the arm-pieces and belt black. The arm-piece should be trimmed with patent leather, and neatly stitched or stamped. Cover the wings with unfinished russet leather, and paint the front side the same color as the running part, and the back lake, the same as the body. The body stripe with gilt $\frac{1}{4}$ in. wide, with a hair stripe on each side thereof. Trim with red plush. S. W. SPAULDING.

CUTTER SLEIGHS (PORTLAND AND NEW YORK).

Illustrated on Plate XIV.

THE first figure on this plate is of the Portland, Me., type, and is quite simple, although a very neat affair.

The second is in the New York style, contributed by our friends Messrs. French, Spaulding & Shepley, of Binghamton, with a simple alteration in the fender. The following remarks accompany it: "Place the body-raves 2 feet 4 inches apart on the beams; get the body-rave out 4 inches wide at the front end, and the hind end 7 inches; let it swell 6 or 7 inches. Track of the sleigh 3 feet to 3 feet 3 inches wide. Paint the body lake, and stripe it with a gilt stripe $\frac{3}{16}$ in. wide, with a hair stripe on each side of it, and the running part of some light color."

DESIGNS FOR CARRIAGE-PART CARVING.

Illustrated on Plate XV.

NUMBERS 1, 2 and 3 are from designs furnished to us by an attentive correspondent, Mr. H. S. Williams. He says, on introducing the subject: "Spring-bars being more prominent than any other portions of a carriage-part, they can be carved to the best advantage; therefore, we will commence our designs by giving a few patterns for finishing the ends."

"Nos. 1 and 3 make a neat finish, and look well on either light or heavy work, and are especially applicable to varnished work, which is becoming very fashionable throughout the West, for trotting buggies."

No. 2 is a Western design for a spring-bar or head-block, which Mr. Williams tells us "will make a beautiful finish when painted and touched up properly," and he expects "any good ornament painter will understand that part of the business."

Mr. Williams further remarks that "the stem in any piece of carving should always form either a single or double curve; never more, if it can be avoided. The great trouble in the West with carving, is in the fact that most of our painters do not well understand touching it up. We have often had our best jobs completely spoiled by this lack of knowledge as regards striping by the painters." We have an interesting article on the subject of carving, from Mr. Williams, which we design to give in our next issue.

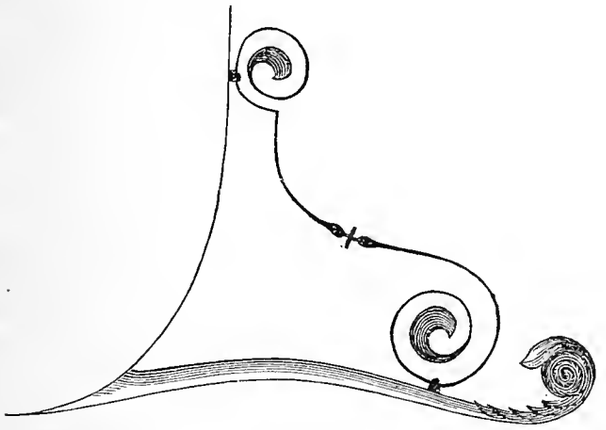
On the same plate we give No. 4, a design for the centers of beds and spring-bars; No. 5 is for the face of a front-bed where such are carved. No. 6 is intended for

large spring-bars and the central portion of back-axle beds. We have been at considerable expense in getting up this plate, and hope that it will be appreciated by our patrons, as both practical and useful.

Sparks from the Anvil.

COACH PUMP-HANDLE STAY.

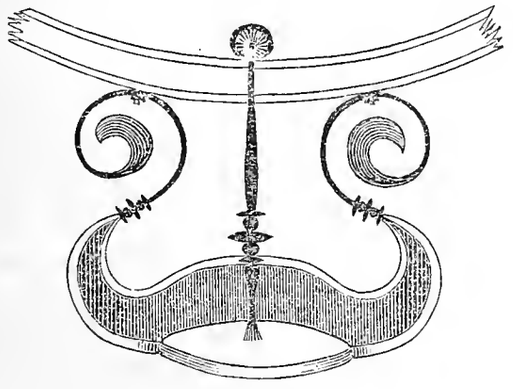
A FRIEND in New Haven, Conn.—Mr. Wm. G. Baker—sends us, among others, the design for a pump-handle stay, here presented, which he assures us gives a very



elegant appearance to a coach when finished. He adds, "I could not think of a more perfect scroll, and if you think it worthy of a place in the Magazine, you will oblige me by inserting it."

DESIGN FOR A COACH STEP.

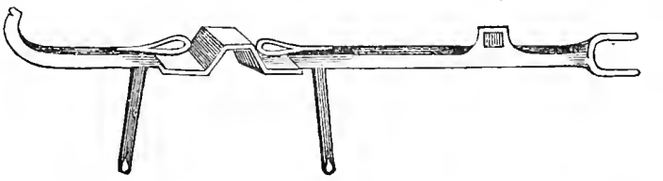
Among the designs referred to in the previous article, Mr. Baker sent us the design for the coach step we give



this month, a little altered. It will make a very pretty step, but we cannot claim for it much novelty. We hope to hear from our correspondent again.

COMBINED SPRING AND HORN-BAR STAY.

THE illustration represents a new French design for securing the front springs to the fore-carriage of light vehicles without a perch, in combination with the stay to the horn-bars. This stay should be well fitted over the front-bed, a matter to which, in some cases, too little at-



tention is given. The two portions that drop are designed to form the shanks of steps, when pieced out. This form of forging, is new and very befitting the kind of work for which it is designed. We are indebted for this to our French cotemporary.

BATTLE OF THE AXLE-TREES.

HAVING noticed in recent numbers of the Boston *Cultivator* a discussion of the subject of wood and iron axles, as to which are the best, with some interest, we are induced to present the result to our readers for their consideration, and shall be happy to have their "opinion" in this matter. The question is first presented by Mr. Geo. B. Weaver, in the *Cultivator* for June 2d, 1860, who says:—

"We have had some *pro* and *con* talks about iron and wooden axle-trees for heavy loads. Some talk for one and some for the other. I wish the matter could be scientifically investigated. I have been in favor of iron axletrees heretofore, but there seems to be some evidence that the wooden ones draw the easiest. If it is so, I conclude that there is some particular size for a particular weight to get the least friction, and I am inclined to think that we get strength enough in iron to bear the load by bringing the friction on too small a surface. I admit the principle that the smaller the axle the longer the lever (in the spoke) in the same height of wheel. This is indisputable, but may there not be some reason in the other idea? I heard a man say that he could draw more load with his three horses on two wagons, than if he had them all on one wagon. Why is this? He had some six or eight hundred more to draw in the extra wagon. Was it not because the load had too little bearing on the two axles of his wagon, which were iron?

"I wish you might touch upon this subject, hoping by agitating it the truth in the case may be elicited."

To the above, James Stiles, Jr., of Middletown, Mass., responds, in a plea for wood axles:—

"I see by your last issue that this subject is brought up for discussion. Your correspondent, Geo. B. Weaver, is anxious that this subject should be settled by scientific principles. Is there no one who is able and willing to practically demonstrate which is the better? I would recommend that some of those who have heretofore used the iron axle (which as a class are the *people* of New England) now try the wood. I have had considerable experience in getting up wagons, being a blacksmith, and keeping several carriages for my own use, and to let; and I have for some time been inclined to think that the wooden axle is the best for all wagons, both heavy and light, unless they are to be used upon an almost dead

level road. This hauling about over our hilly roads heavy iron-axles is not what it is cracked-up to be. An iron-axled ox-wagon is something of a load in itself for one yoke of oxen, on some of our steep roads, as they add from one third to one half to the weight of any wagon or carriage. Some of our lightest buggies are literally loaded with iron; the more the better. 'Why?' Because they sell better; most people 'love to see a well-ironed wagon; it is strong and light, because the iron is so very small.' Very well; but is not wood much lighter? An axle of wood is not half as heavy as one of iron, and will perhaps stand twice the strain. We seldom, if ever, find a wooden one broken at the shoulder, yet it is quite common to see the iron thus broken. A carriage constructed almost entirely of wood might look quite clumsy beside a York buggy, while at the same time it might not weigh more than half as much and be equally durable and strong. If the iron upon a carriage is not screwed up tight, it soon rattles and helps to shake the vehicle to pieces. Few people attend to this, and therefore, the more iron the worse the carriage.

"I have recently got up a wagon, somewhat resembling a York buggy; its weight is two hundred and fifty pounds, but had I used steel instead of iron tires, its weight would not have exceeded two hundred and twenty, while its capacity to carry a load is equal to a common Concord wagon, which weighs about four hundred and twenty-five pounds. It is also much quicter while running, and being composed mostly of wood, is less complicated and liable to get cut of repair. The axles are walnut, and without skeins or dogs. The boxes were polished and so arranged that no dirt can enter them. It would seem that they cannot last long, but this is a mistake; it is the dirt and the getting dry that cut out any axle or shaft. In many of our machine shops maple and walnut are used for boxes where the gear runs at almost lightning speed, and are said to be better than any composition metal whatever. A machinist once told me that a box made of white pine would last longer than an iron one of the same kind as the shaft. It should be remembered that the shaft is always polished. Now, just polish the boxes for your wagon, get the best locust, or walnut, for the axles, and a man who understands setting them on (but few do, and that is one reason why so few are used), and you will be surprised to see how light your carriage is, and how little it has cost. But it is not the iron axle alone that costs money, but the necessary fixtures to go with it—clasps, yokes, fetchels and bolts to secure them with, all of which must be attended to every time the carriage is taken out. An objector may say, 'Your hubs must be much larger for a wooden than for an iron axle;' not so; use short boxes and the center of the hub will need no more cutting out than for the ordinary pipe box, while the friction in the former will not exceed that of the latter.

"For wagons of heavy draft, nothing is found better to fasten on the wheels than the old-fashioned linch-pin; but for riding carriages, I think the best fixture is the one I have adopted, which is a joint bolt about twelve inches long, a nut to receive it being set into the axle near the sand band; the head of this bolt is about an inch square. The end of this axle is cut off even with the end of the hub; a steel plate washer covers the axle and so much of the hub as to keep the wheel in its place. The plate of course has a hole in the center to admit the bolt before-mentioned, and another hole near it for a short pivot, to prevent the plate from turning. This is a very neat fixture, and there is no possibility of its getting out of repair. The bands upon my hubs are silver-plated, and there is no neater looking wagon on the road. So close is the resemblance to an iron axle, that but few wagon-builders would discover the difference until their attention was particularly called to this part.

"Fearing I have already trespassed too much upon the attention, I hope others will take up the subject and frankly tell us what they think; and if any are disposed to catechise me in relation to the views herein advanced, I stand ready to answer to the best of my ability, and if fairly dislodged from my position, will own up. I have more to say upon the subject, but will reserve it for another occasion."

The further discussion of this subject will be resumed in the next number.

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page* 54.)

THE former article was written previous to the issue of the November number of the 2d volume, which contains "Old Fogy's" remarks on "The Reason why Varnish-changes by Standing," &c. I am glad to find that our opinions do not widely differ from each other's on the different questions of which "Old Fogy" treats. But in this, as in every other case, we have to make a distinction between the qualities of the varnish used. All varnishes will stain before they are dry and hard; some will after, and some will not. I am inclined to think that varnish which turns blue with dampness has not a sufficient quantity of gum in it to prevent the oil or varnish from absorbing the dampness, while that which has more gum in it prevents the moisture from penetrating below the surface, thereby retaining its natural gloss.

With respect to varnish turning gray, I would remark that all bad varnishes will turn gray, in whatever position they may be placed. Good varnish but seldom changes. I shall venture to assert that "Old Fogy" never knew an instance of Nobles & Hoare's best body varnish turning gray—I never did—but varnish made by another English firm, and which I think "Old Fogy" uses, will do it, I know. A short time ago I painted six large coaches, using the same kind of stock to them all, and putting them all through the one process to the last coat of varnish. Five of them I finished with Nobles & Hoare's varnish, and one with another English varnish. The under coating was a heavy English varnish, manufactured for under coating expressly, which rubbed admirably, and had a good shine, but set quick, and cracked when exposed, even in a clean dry show-room, in two months. The five stand first rate, and give the best of satisfaction. They all run over six months before they were re-varnished, and all were used for heavy hack-work, being in use almost every night and day. Some of them stood in a dry show-room six months previous to being sold, but not a crack can be seen upon them. The odd one the first five months gave the best of satisfaction, and appeared equal to any of the rest; but upon coming to the shop to

be re-varnished, some three weeks afterwards, I was surprised to find it had all cracked, and upon the edges of the panels and moldings had scaled off and turned "gray." It was sand-papered off in a fine powdered dust, but not because the stable was damp, or because steam from manure had settled upon it, for it averaged ten hours' work out of every twenty-four it had seen since leaving the shop. It had always been washed once, and no doubt very often twice a day. The differences between these varnishes are, that the one can be bought for 5 dollars a gallon on time, and the other at $5,75 for cash only, and for the sake of this small difference (about 20 cents on a coach-body), a material is used which cannot be depended upon.

I don't ask any Old or Young Fogy to take these assertions on my own responsibility. They can be fully substantiated by fifty reputable witnesses. I do not question that dampness and an impure atmosphere will turn a majority of varnishes gray; I know it will, and I think if exposed to an excessive heat that would be equally as ruinous, as it absorbs or draws out all its adhesive qualities, and leaves it dry and brittle, similar to whiting putty when all the oil has dried out of it.

With regard to varnish turning smoky, cloudy, &c., this can only happen where a carriage stands in a smoky room. If the paint and varnish are not dry, the surface will not have that lustrous shine it would have had had the last coat been put upon a hard foundation. You will not find a blue, cloudy, or smoky, dull coating upon the surface, except where smoke collects in the room. Common coal smoke is not so injurious to varnish as dampness or steam from manure. Should it look ever so dull, a few good washings will make it all right.

The rules for applying wearing body varnish are to the point, and are worthy the attention of all painters. The 4th section induces me to think Old Fogy does not use Nobles & Hoare's varnish, for you would have to lay on a very heavy coat before it would crawl or shrivel; but varnish made by another English firm (and it is very good varnish, except that it has this one fault) will crawl and shrivel, and the best workman cannot prevent its doing so. To make comparisons between the different branches which are employed in the construction of a single vehicle, seems unnecessary and uncalled for, in a magazine which aims to encourage and benefit all classes in any way connected with carriage manufacture. But as the difference in the skill and requirements requisite to make a capable and efficient workman in any single branch are so great, a few words respecting painters and painting may not be unacceptable to those who follow that avocation, and likewise to the general reader. To generalize the class of men professing to be carriage-painters, we have to confess they are the most motley crew employed upon carriage work, while there is no other branch that requires more training and experience; no other branch that is so dependent upon the labor and exertions of others; no other branch which has those unaccountable little vexations which harrow the mind and cripple the spirit; no other branch that is thought so little of, and that does more to bring all other branches to a satisfactory state of perfection—for no matter how well a body may be made—no matter how well a body may be trimmed, it is of little account how perfect the iron work may be executed—if the painting does not correspond, all the other branches are thrown into insignificance. Where is there a trade more abused, or that has more incompetent followers in it? Echo answers, Where?

That this state of things cannot last always, must be plain to all. Men that have been but a few months in a paint shop, and have the impudence to demand as much pay as men of experience and qualification, will find sooner or later that the trade will not supply labor for all who please to recognize it as the craft they choose to follow, and which they too often disgrace. There has been such an indiscriminate amount of raw help taken into paint shops, during the last four years, that the trade is overrun with help which upon trial turns out to be worse than no help at all. This, to a certain extent, is more the fault of employers than anybody else. If men will be so ignorant as to undertake to learn a boy his trade in three years (no matter what branch), they cannot grumble if such help comes back to them and demands fifty per cent. more pay than they are actually worth. There is no branch of carriage-making that a boy can learn in three years. He may comprehend the system how work is done in the shop he is working at, but is he capable of going into a strange shop and taking hold of any job that he may be put at? Can a boy that has learned his trade in a shop where nothing but buggies are built, if he be a body-maker, go into another shop and make coaches, carryalls, or even a good chaise? If he be a painter, would he be able to finish his work as large work is required to be finished? Should he be a blacksmith, would he be able to meet all the requirements requisite to that profession? Why, of course he could not.

But you say, should he stop three years longer, he would learn no more. Possibly no more about buggies; but his mind would be more matured—would have more grasp to it—would comprehend and discriminate more as to the way such and such a new job should be done. He would have more confidence in his own abilities, and a more extensive knowledge of his business. The same is equally true with men that learn their trades at large work. It is a question if there is not as much skill required in constructing a first-class buggy or chaise, as in building a larger vehicle. There is certainly as much for the trimmer. A man that can trim a buggy or chaise in the style our Boston custom-made work is trimmed, can challenge his workmanship against all competitors from any city in any country. A boy that goes to his trade at fifteen or sixteen, and is free to act for himself at eighteen or nineteen, I consider has not that comprehension and tact, that maturity of mind and intellect, which constitute a thorough, practical mechanic. Indeed, it is open to discussion whether he is not a great loser by that which he looks upon as a great gain. A boy that earns five dollars per week for his third year's service, at the end of which he is free (he claims his freedom), and should he be lucky enough to procure another situation, or an offer of one, at eight, nine, or even ten dollars per week, if he accepts it, he almost thinks he is doing you a favor by working so cheap; when, should the work you put him at be a little different from that he has been accustomed to, you have to give him instructions, as though he had never been in a workshop. The money he thus earns gives him the opportunity of indulging in those foibles and follies which gradually lead him to a dissipated and disreputable life, and which, beginning at a time when common-sense and reason were about to be engrafted in his mind, he refuses to follow those good examples, and

to listen to that sound advice which may be tendered to him by those who wish him well. In fact, this giving half-boys and half-men the liberty of starting upon their own hook—of treating the "old man's" wishes and commands as "all gas;" of putting money in their pocket before they know how to properly spend it, or have brains enough to earn it, often leads young men into those immoral excesses which are too often followed by total ruin.

If a boy were kept at his trade, as he ought to be, until he attains his majority, how much better would it be for his abilities as a workman, and most likely for his moral character as a man; for, by that time his mind and intellect would be more ripe to engage either in the walks of his profession, or the duties of a citizen. These remarks are suggested by the fact, that three years are considered sufficient time for a boy to learn any branch of carriage-making in a majority of carriage-making districts; although it is usual in Boston for boys to stay until they are twenty-one. It is for employers to consider whether apprentices who serve but three years are remunerative enough for the trouble and annoyance which (without they be very good boys) they occasion. It is not often that boys earn their pay the first year; it is all they can do the second year; and by the time a boy is getting to be worth his wages, and you are receiving a little recompense for the past, his time is "out," and no doubt, with a good share of presumption, he asks for more pay than the employer knows him to be worth. So he starts upon his own bottom, gets a job upon strange work, cannot give satisfaction, and so begins to work first in one shop, then in another, until his name is up as an inexperienced workman. He gets work during the busy months, but afterwards earns but a precarious livelihood. Employers can take the blame to themselves for a great deal of the incompetent and unprofitable help which every branch of carriage-making is overloaded with, but especially that branch occupying the paint-room. They will not trust a green hand with a piece of cloth or a side of leather to cut up, or a bar of iron to pound at, nor yet expensive lumber to hack; but a man that will have the moral courage to designate himself a painter—for such they have no scruples in shoving a cup of paint or varnish into his hands (value 50 cents), and let him grease away! As I have before remarked, this branch of work is so deceptive, that if it only shines at a distance of ten paces, the real merits of the painting is but seldom questioned or inquired into.

This disregard of the qualifications required to constitute a good and efficient carriage-painter not only brings discredit upon its followers from mechanics who have no connection with the business, but other branches of the trade are in no way particular or polite in their expressions toward the only thoroughly *artistical* branch of the profession. They all seem to be imbued with the idea that the painting of a vehicle is a secondary consideration. None of them think or acknowledge the obligations they are under to the painter for all the defects of which *paint and putty* are supposed to be the healing balm. The body-maker's bad joints, half-planed panels, and bad sweeps all go unnoticed. The blacksmith's bad welds, deep hammer marks, and half-filed work are all "taken in and done for" with paint and putty, until it would scarce be known as the same piece of work. The wheeler and carriage-maker have their little imperfections attended to, and even the trimmer owes some acknowledgments to the painter; for the eyes of the inexperienced customer are so bedazzled and charmed by the shine of varnish and glare of colors, that when they are directed to the inside work they refuse to perform their usual avocations, and fail to discern the irregularities of the tufting, of half-stuffed backs, of slovenly folded curtains, of lace neither pasted nor nailed, and stitches grinning at each other, of not more than six to the inch (I know you will say "Fudge!" but "that's so"), and all of them think, how simple it is to learn the painting business!

Should they ever get "stumped" in their own branch, they will take "right hold," and "go in." There are even some men (and I can refer to one in particular) who have so high an estimation of their own abilities, and so little regard for the qualifications required in a painter, that they openly assert that *they* could learn the trade in fourteen days! All such ignorant and careless expressions may serve to intimidate and perplex the "sapling" at his business, but by those who have the requisite confidence in their own ability to defend and protect their calling, such expressions will be met with that contempt and derision they deserve. A carriage-painter I take to be nothing more than an agent of stock. If that be bad, he has not and cannot have skill enough to make it good. There are scores of different ingredients used, any one of which, if not properly manufactured, may ruin all the others, and he never know the identical delinquent; but not so with any of the other branches. The body-maker, if he bores a hole wrong, splits a panel, makes a miss-cut, or meets with any accident he is liable to, can soon replace it, with trifling expense. The trimmer, if he ruin a yard of cloth, can buy another yard and make it up; if he cut an inch too much off, can add an inch to it; and should he sew up a wrong seam, it can easily be undone. Should his cushions require a little more hair, or his leather work a few more stitches to the inch, it is no sooner suggested than adopted without delay or confusion. Should the blacksmith's iron be too long, he can cut a piece off; should it be too short, he can weld a piece on; should he bend his iron the wrong way, he may as easily cramp it back again; should it be a little too thick, he can file it off, and should it be too thin, he can "jump it up." All—all have their remedies and cures, except the poor painter. His is the hardest fate of all! He uses all his skill, and tries to be minute in all the little details from beginning to end, and very often his labors are anything but satisfactory either to himself or his employers. If his lead is not good, it will not spread or absorb in the wood; if his oil is bad, it will not dry; if putty is not made of the best materials, it will not harden; if rough stuff is not prepared with a proper regard to quantity and quality, it will not make a good and smooth surface; if colors are not mixed right, they turn cloudy and streaked; if varnish is laid on before colors are dry, it cracks; if varnish is used that has not enough oil in it, it cracks; if it has too much oil in it, it cracks; if one coat of varnish is laid before the last coat is dry, it cracks; if one coat is laid upon another that is too dry and not properly prepared, it blisters; if one coat is laid upon another, and the ingredients in each do not agree with each other, it crawls; if it is laid in a damp atmosphere, it pits; if laid in too hot an atmosphere, it looks dull. Every iota from beginning to end has its trials and perplexities, and when they are all properly understood, a man comes to the conclusion that almost any trade is preferable to coach-painting; for

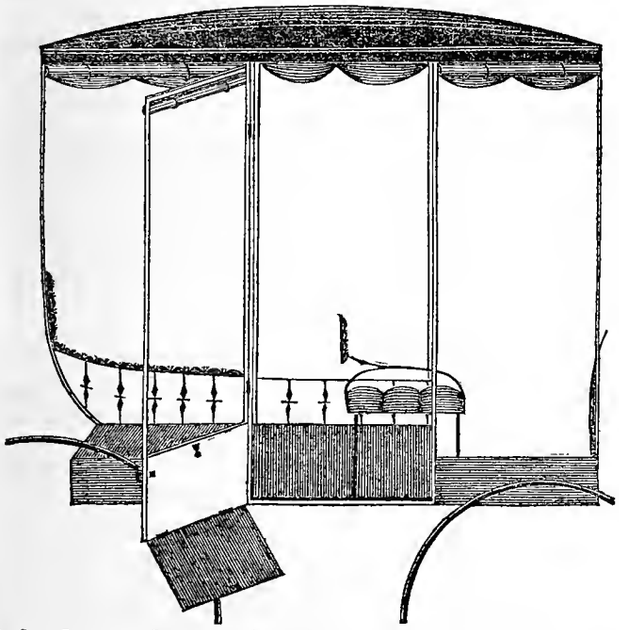
after being so nice and particular, as he supposes, and feeling so confident of having completed a job which ought to give satisfaction, and which does so for the first three or four months, but then begins to show signs of a false foundation, his wits are puzzled to account for it. He cannot account for it, but it is certain there has been at some stage of the job a little indiscretion—a want of a little forethought. It may all have been done by adding a few drops too much oil, or it may be a few drops too little. It might have all been caused by injudiciously giving one single coat of paint before the preceding one was perfectly dry and hard. You may have given each of the preceding and succeeding coats a month's time to harden in, but no matter; those two coats of paint, the one worked up into the other, are sufficient to destroy all that has been done right, and all that you may hereafter do right. *(To be continued.)*

Trimming Room.

For the New York Coach-maker's Magazine.

LADY'S DRESS PROTECTOR.

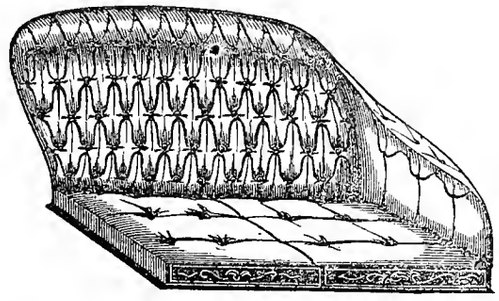
Mr. Editor:—The drawing I send you represents a Jersey wagon designed to take the place of the turn-over seat. The door is shown open, with a lady's dress protector attached, being an entirely new arrangement. This is accomplished by an iron frame, hinged to the bottom



of the door and covered with patent leather. This, when not in use, can be secured in its place, by a ketch, to the door. The hinges may be formed like those to a trunk-handle, in order that they may set level and not strike the wheel when the door is open. These protectors may be formed in any shape to suit the fancy. F.

THE DOG-NOSE CARRIAGE-LINING.

This is a peculiar style of trimming for phaetons or other open carriages. To a practical trimmer very little need be said in explanation, and an unpracticed hand will require instruction from one of experience to do it successfully. Having prepared a stiff-back of buckram, to this the cloth must be secured with buttons at proper distances in folds to allow of stuffing with curled hair, as



shown in the engraving. Leather is too inflexible an article to carry-out this style of trimming, and therefore should not be used. We are pleased to find that its use for carriage-linings is fast going out of fashion among our eastern friends, who in this particular certainly display much judgment; for a more injurious article to a lady's silk dress could not well be invented.

LETTER FROM A TRIMMER.

Middletown, N. Y., July 26, 1860.

Mr. E. M. Stratton:—*Dear Sir*, I cannot help but say a few words in behalf of your valuable Magazine, as I have had the pleasure of perusing it the past two years. I would like to be let into the ranks with my fellow-craftsmen, and send you some designs for stitching-plates occasionally. In conclusion, let me say that I think your Magazine has improved very much the past year, and may it continue to do good for the cause in which its proprietor is engaged and at which he seems to be aiming. I think I shall be able in a short time to send you some new subscribers.

Yours, &c., R. A. W.

[Such letters as the above are very encouraging. It will give us pleasure "to let into the ranks" of our correspondents our friend R. A. W., and we are disposed to take as many other trimmers as may wish to enlist. The monthly wages of "our soldiers" will be found stated in the Magazine for June, at page 14, to which those interested are referred. Our friend will please remember us often.—Ed.]

Beveled Carriage-Bands.—Our enterprising friends, the Ives & Pardee Manufacturing Co., at Mount Carmel, Conn., have sent us a new style of bands. The idea (for which they have made a patent application) is that while the draft on the inside remains the same, by a process of beveling the outer surface they are enabled to reduce the face of the band in the diameter, thus giving a lighter appearance to the hub. There are several forms of beveling which could be adopted, and it is the intention of the Company to cover the whole principle in their application. A specimen may be seen at this office.

The New York Coach-Maker's Magazine.

SEPTEMBER 1, 1860.

E. M. STRATTON, Editor.

EDITORIAL VIATORY.—(SECOND ARTICLE.)

SCARCELY had our journey, described on page 55, ended, before we were once more hurrying into the country as fast as the locomotive could take us. This second visit was undertaken chiefly with the view of calling upon the manufacturers of such articles as enter largely into the construction of carriages; but, as the sequel will show, was not confined exclusively to them.

Our first call was at Plantsville, Ct., named in compliment to an enterprising firm of that place, doing business under the title of The Plants' Manufacturing Co. This place is 97 miles from the city of New York, and 21 miles north of New Haven, on the line of the Canal Railroad, extending from the last named city to Northampton in Mass. This name—Canal R. R.—it derived from the circumstance that it occupies the bed of the canal formerly running the length of this road. Here among the hills, fanned by the breath of a wholesome atmosphere, we found the establishment of Messrs. H. D. Smith & Co., where are made clips of every kind, shaft-couplings, bow slats, fifth wheels, stump-joints, band setters, and other "notions too numerous to mention;" but which are very essential in building carriages. In connection with this notice, our readers will please consult the advertisement of the firm with this number.

Leaving Plantsville, in our return we stopped at Mount Carmel, so called in compliment to its local surroundings by our puritan ancestors, when the country was first settled. As with places, so with their children, they were partial to scripture names, which evinces that they set a high value upon sacred history. There we visited the Ives & Pardee Manufacturing Company's establishment, of which, doubtless, the most of our readers have heard. Casting, turning and plating comprises the most of the labor there performed. An inspection shows that vast quantities of hames, tips for hames, poles and shafts, bands, nails, &c., are made there. If any fact is necessary to prove that variety of tastes abound in our extended country, it may be found at this establishmet. Some articles, admired in the eastern section of the United States, are discarded in the southern, and so likewise with the western people. Even in so simple an article as the hame-tip, a different pattern is employed in getting them up. It would exceed our limits to enter into minute details of every article made there, but our readers will form some idea of their extent, by consulting the company's cards in our advertising department. Close-plating and electro-plating are both done on the premises very extensively. The latter process being comparatively new in this country, a few remarks in regard to it may not be inappropriate.

Electrotyping, or galvanizing, as it is frequently denominated, in compliment to its discoverer, Galvani of Bologna, has seemingly some mystery about it, and yet is deducible from natural causes. Certain results are produced from the composition of electricity, magnetism, &c., acting in combination. Here Smees' batteries are in use, and the ingredients employed are water and sulphuric acid, in the proportions of 7 to 1,—the trough containing a mixture of water, cyanide of potassium and chloride of silver, in which are suspended the article *to be coated* and the mineral *to coat with*, detached from the batteries, but acted upon by copper ducts therefrom. By a singular property, the article to be galvanized may be coated with any thickness of metal, according to the wish of the operator. The coating will be in proportion to the time the article is subjected to the action of the batteries, so that it is a mistaken idea, that *plating* by this process only allows of a thin coating. We were astonished to find, that galvanizing is not confined to metals alone. We saw apples, pears, &c., that had been coated with a thick *skin* of silver, in which was preserved all the nicety of the outer features of the natural fruit.

When the article to be silvered has received its coating, which will be in a few moments, it is lifted from the trough, washed in water, and buried in fine saw-dust, which process has the effect of removing all the acids that may remain after immersion, and thereby removing the chief cause of that corrosion we so frequently see in *galvanized* articles. Afterwards the work, which up to the present time has a dull looking appearance, is burnished in a lathe, with a blood-stone burnisher, imported from England. Here we found the lately patented odometer, which is a perfect instrument in comparison with any other yet invented. We hope to illustrate it soon.

On our way home, we visited the New Haven Wheel Co.'s establishment, in the city of New Haven, where wheels are "turned out in any quantities," ranging in price per sett, from 6 up to 14 dollars. No one need go from this establishment unsuited, for all qualites suited to the prices paid are furnished. The Company had on hand at the time of our visit 50,000 dollars worth of stock, in all stages of seasoning. We saw "in piles" hubs, spokes, rims, &c., enough to stock several lumber-yards. Of hubs alone, there were 20,000 sets, and all so nicely arranged in ventilated storehouses as to cause them to season under peculiar advantages. This Company is the only one in the East having the right to make and sell the Sarven patent-wheel, now coming into favor with those who desire a light and durable wheel.

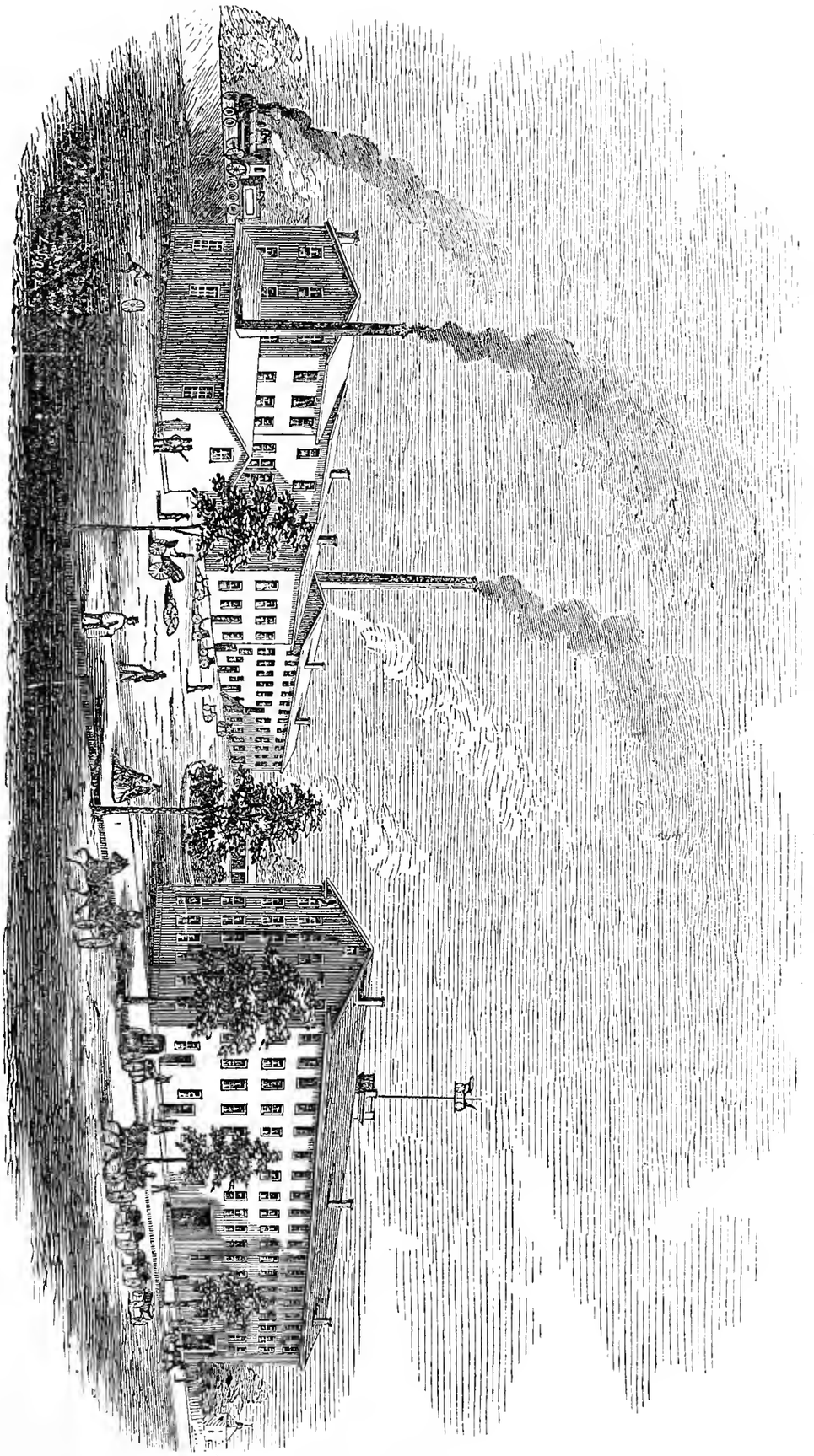
Near by, at 51 Broadway, we called upon the Messrs. Barker & Baldwin, and found them building for the trade every style of body, from the lightest buggy to the heaviest coach. From actual inspection, we feel assured that this young and enterprising firm have the experience as well as facilities for furnishing any kind of a body at short notice, much better and *cheaper* than a single one can be built in one's own shop. Besides, here can be found ready made, bodies to suit all tastes. Carriage-makers wanting bodies will do well to give them a call.

As we had often heard of, but never seen, that fine specimen of a live Yankee, George T. Newhall, Esq., and being in his neighborhood, we embraced this occasion to make him a call. B. S. L., a correspondent on page 198, Vol. 1. of this Journal, had partially prepared our mind for "a sight." As may be somewhat observed in our engraving, the poet in this instance has in his flight fallen short of the reality. Hear what he says:—

"One building, some four stories high,
In length two hundred feet,
With numerous other shops about,
Extend from street to street."

In addition to those referred to above, Mr. Newhall has lately erected another "four story" shop 32 by 60 feet, and not embraced in our illustration. The shops in the picture cover four acres of land; and when we state that without capital or even credit our friend commenced business, on his own hook, only ten years ago, our readers must with us admit that he is something more than smart.

After spending some five years in a "one-horse shop," as he would now call it, he came to the conclusion that by calling in the aid of machinery and systematizing his business, he would be able to defy competition and sell carriages lower than any of his neighbors. All thought him crazy, and some even went so far as to counsel him that he would soon be a ruined man. Now, although we



VIEW OF GEORGE T. NEWHALL'S CARRIAGE MANUFACTORY, NEW HAVEN, CONN.

do not feel like encouraging such a wholesale making of vehicles, still the most casual observer must concede that he knew what he was about.

It is now some four years that he has been "making wagons by steam," and with his 35 horse-power engine and about 180 hands, he finishes complete, of one kind of buggies, 112, and of straight trotters, about 250 per week. We saw a Massachusetts lad there, who had only been at the business three months, and yet could easily put together three bodies a day, and, with a little exertion, finish ready for the painter 20 each week. He had at one time 8 bodies as his task for a week, and made during that time *only* 18! An order for half a dozen buggies, of which about 20 descriptions are made, can be filled, if not on hand, in two or three days, as Mr. N. is constantly prepared with the parts finished to the first coat of varnish. The prices paid for *making* buggy bodies is 62½ cents each. We saw on the premises 400,000 spokes, dressed and in the rough, and yet our friend declared that they would not supply him for a year! But we must stop, or our readers will discredit our report, although we can assure them that we do not exaggerate in the least. We went like the queen of Sheba, to see for ourself, and found "the half had not been told us!" Those who doubt, will of course go and do likewise.

STEAM CARRIAGES.

In our last volume we gave an account of Rickett's English and Fisher's American steam carriages, illustrated by engravings. English journals of recent date mention that Rickett has built another carriage; and in the way of heavy steam machines called "traction engines," for slow draft on common roads, there are eight or more plans at work. It is represented as satisfactorily proved that steam works at less than half the cost of horses for freight at three miles an hour; and that it is convenient for light passenger vehicles at ten to fourteen miles per hour, and probably will be cheaper than horses for such service.

The old experimenters, in 1830 to '40, considered that steam for slow work would be least profitable, because horses work at their greatest advantage at two-and-a-half to three miles per hour, while steam works most advantageously at a high speed; if the roads are very hard and smooth, fifteen to twenty miles is not too much for them.

From all the accounts, and the opinions of engineers who have examined the subject, we find that there is a general and confident expectation that the present introduction of steam is to be permanent. There is less opposition than there was twenty years ago; and there are many who believe its use will promote their interests. All that appears to be wanting is a patentable plan that is evidently so much superior to all others as to secure a large share of the business of building, at a rate of profit that will warrant the investment of a large capital in the manufacture of steam machinery for common roads.

The first in the present movement was Boydell, who, about five years ago, was induced to engage in it by his invention of a "traveling railway," laid on platforms which were laid down and taken up by the wheels. The next was Berry, who, seeing the success of Boydell, and believing that his platforms were not the cause of his success, designed a simpler machine, which was successful. Others soon followed with nearly equal success. And the real difficulty now is, that a sharp competition seems unavoidable, and low profits, not enough to warrant the hazard, are all that can be anticipated.

If all the inventions now patented or patentable were merged in one company, the case would be far more encouraging; but even then, there would be the prospect of the competition of the four-wheel locomotive, in its simplest form, which every one is free to build, and which will be sold at mere builder's prices. And this, many engineers believe, will prove a better as well as cheaper machine than any of the new inventions, for slow motion. The new machines have all complex gearing, liable to much friction and wear, and, on the whole, heavier than the locomotive form, in which the engines are large enough to slip the wheels—that is, to do all the work possible.

For common road work, the gearing system is likewise adopted, but for a different reason—namely, that the direct connection, where easy springs are used, will cause pitching and rocking of the carriage body. The *London Artisan*, in 1843, about the time of the last and swiftest of the English steam-carriages, says:—"The great obstacle heretofore experienced has been the impracticability of hanging them on efficient springs. This is more difficult than might at first sight appear; for at the same time that there must be rigidity between the cylinder and the axle to transmit the power, there must be flexibility to permit the springs to act. If the springs be impeded in their action, or be too strong and rigid, the machinery will be soon knocked to pieces by the concussions of the road; while if the springs be sufficiently elastic to obviate this evil, and the cylinder and axle be directly connected, the springs will yield with every stroke of the engine. Here, then, steam-carriages have stood in a dilemma which they have not as yet been able to overcome; they have not been able either to avail themselves of efficient springs, or to do without them; and we are thoroughly assured that they cannot be successful until this difficulty has been completely surmounted."

The *chain* gearing used by Rickett, also by Hancock and Church in 1836, obviates the bending of the springs

by the engines; but the chain itself is liable to be broken if the springs have much play.

By referring to our number for last April, it will be seen that the connection in Fisher's carriage avoids this difficulty, without encountering any other. And this invention, if it be properly taken up, may secure the necessary protection to those who invest capital to introduce steam on common roads.

It would be an act of justice, as well as of sound policy, for the British government to renew the patents of Gurney, Hancock, Ogle, and several others, who were unfairly driven from the roads, and prevented from obtaining the reward they had earned. If all these patents could be consolidated into one, and granted to one company, the stock being divided among the original inventors and the capitalists and engineers who revive the enterprise, free competition would be prevented, and a fair profit could be made. Of course, those who have recently spent time and money on new plans should be allowed to come into the company on the same terms—that is, to assign their inventions to it, and receive a portion of the stock.

The division of the stock might be made by judges appointed by the government. If the government grants a patent for what now belongs to the public—though somewhat unjustly got, in this case—it may impose its own conditions; and the grant would be of such value that none would refuse to assign their inventions, on condition that, after all the devices had been sufficiently tested, the really useful ones should be adopted, and receive their due.

It may, however, be thought that inferior devices might be sold at inferior prices, and that they should be allowed to compete, or should receive some share in the stock of the general invention. If they are to be denied the use of the old and free parts, in expectation of using which they got patents, and spent money and time, they should be in some way remunerated. This might be considered by the judges, and the grant might provide that it should be so considered. But, if there are private rights of this nature, there is also a public right; and the public is under no sort of obligation to forego the use of the main invention until those who have made questionable improvements in its details can find means to bring it into use. If, therefore, the public chooses to grant a patent that shall prevent inferior machines from being sold at inferior prices, to persons of inferior judgment, it is no more than what is allowed to individuals, when they dispose of what is their own, and we see no objection to it.

Each inventor probably expects that *his* device will work best, and be adopted. He would therefore prefer to take his choice of a large reward for the use of a successful device, rather than to share in an award diminished by compensation to inferior devices, as the condition on which they were to be tied up, and kept from damaging the trade. Either way may do; but in some way the patent, too, should succeed in doing what it was intended, but in this case failed to do; it should try again the encouragement of a monopoly for a limited time. And without that encouragement, or a direct bounty, this invention may linger thirty years longer, although men of science and skill are confident of its ability to work at half the cost and double the speed of horses on good common roads.

While we deliver this lecture to the British government, as having deserved it, by its refusal to protect its own patentees against prohibition tolls, and other unjust opposition, we would also say that the same policy would be equally sound and liberal for our own government. We have had many trials that failed for want of capital, and somewhat for want of fair treatment and from sordid opposition. Some of those who made them are in their graves, others near them, and their families need the money they lost. It would be liberal to grant a consolidated patent, whose profit should be shared between those old inventors and the new ones, and their backers who may succeed in rendering the invention usefal to the public. And it would be wise, in a self-regarding view, for the public to bargain that those who will establish the invention shall be paid for it. Even if it could be calculated that the inventors who are now laboring will in a short time succeed in shewing that steam can work advantageously, and that as soon as they have shown this fact, orders will be given for machines on the old plans, and thus the public will be served at the cheapest rate, it would still be a matter of pecuniary wisdom not to accept gratis the labor of these inventors; because such policy would discourage other inventors from laboring in like manner on other inventions; and because the more liberal policy would stimulate them, and induce capitalists to undertake many other improvements.

But the prospect is, that unless such encouragement is offered, the element of capital will not be obtained, and the invention will sleep longer. To bring about such action of either government, there must be some action of men of liberality and influence. A machine of some efficiency must be sent to Washington, to show that the invention merits such encouragement. And to get up such a machine, there must be more money than happens to be in the pocket of any one inventor. We have stated that Mr. Fisher has an unfinished carriage which has run at over twenty miles per hour. This is the best performance yet made on American roads; and we think he is entitled to the co-operation of the friends of this improvement.

The Coach-Makers' Letter-Box.

LETTER FROM WASHINGTON TERRITORY.

FORT VANCOUVER, WASHINGTON TERRITORY, May 17th, 1860.

MR. STRATTON: *Sir*,—I notice in the Magazine, that you request correspondents to furnish you with the width of the carriage-track in their several localities. As I suppose I am the only subscriber in this part of the country at this time, I will give you it as well as I can.

The width of track in Western Oregon and Washington, is 4 feet 6 inches from center to center, and also the same in Eastern Oregon. By Eastern we mean that part of the country lying east of the Cascade ranges of mountains; and Western, that portion west of it. The narrow track seems to have been introduced into Western Oregon by the earlier emigrants, who were mostly from the Northwestern States. The wagons in use east of the Cascades are mostly made in Portland, Oregon, as there is no timber in that section of the country, and are made to track with the government wagons. The government send out expeditions every summer from forts Vancouver and Dallas. I have been all around the garrison at this place, and find that all the baggage-wagons and light and heavy batteries, and the wagons used about the arsenal and quarter-master's department, are all on the wide track; and here I would suggest that should you conclude to advocate any particular track, would it not be well to try and establish *Uncle Sam's track?*

Yours, respectfully,
WILLIAM RANCK.

NEW YORK, July 11th, 1860.

E M STRATTON ESQ
No 106 Elizabeth St N. Y.

Dear Sir!—I was this day informed that you circulated a report that I have withdrawn suits agst John R Lawrence and others for infringements on my patent carriage coupling. which report I hereby declare as false. as there is nothing to warrant any such proceedings.—

You are hereby editorially warnt not to copie any circulated report headed or issued by John C Denman of Newark of which I have been informed, unless you can safely copie certified records from the court of New Orleans, to which the last referred to report relates, from the information received through attorneys and otherwise from New Orleans, there is nothing in the decision of N T Edson vs Dr Thomas Hunt touching the interest of the patentee, of which further information will be given.—I would further add that is was no tridt, as the plaintiff will ask for a new trial, if a new suit has not already been commenced, while I am writing this.

Respectfully Yours
G L HAUSSKNECHT.

P. S. You had better mind your own business.
G L H

[The above *verbatim et literatim et punctuatim* letter is inserted as an interesting document for future historians. The P. S. is peculiarly rich, coming from *such* a source. There are one or two things about this letter which need an explanation. How happens it, if the trial alluded was was no "tridt," that still the plaintiff asks for "a new trial, if a new suit has not already been commenced?" That "information received through attorneys and otherwise" must be of a singular nature to lead to such a conclusion. As to the circulated report, &c., somebody must have "sold" the writer of the letter.]

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

AMERICAN PATENTED INVENTIONS.

June 5.—IMPROVEMENT IN MACHINES FOR MIXING PAINTS.—S. G. Cheever, of Boston, Mass.: I claim the arrangement of the collars which hold and move the mixers of beaters, in their relation to each other, and the actuating parts, so that while the middle series move in one direction, the outer and inner series shall move in the other, in combination with the central curved blades attached to the central shaft—all moving and operating substantially as set forth.

IMPROVED BRIDLE BIT.—Henry Crane, of New York city: I claim the combination of the bars, A C C, the latter being fitted with the bar, A, connected by a joint, *a*, at their inner ends, and and having a spring, F, attached substantially as shown and described for the purposes specified.

IMPROVEMENT IN TEMPERING STEEL SPRINGS.—C. G. Plympton & H. M. Plympton, of Walpole, Mass.: We claim the application of water to steel articles while the latter are properly heated and subjected to pressure, or held by dies, presses, or other device, in the particular form or shape desired, for the purpose of tempering the same, substantially as described.

IMPROVEMENT IN GEARING.—P. D. Cummings (assignee to D. H. Furbush), of Portland, Maine: I claim a universal reversible bolt standard, constructed substantially as set forth, for the purpose of securing a driving wheel to a carriage wheel.

I also claim the combination of the universal reversible bolt standard described, with the driving wheel, by means of a flange upon the latter, substantially as described.

June 19.—IMPROVEMENT IN CONNECTING SHAFTS TO TWO-WHEELED VEHICLES.—H. M. Walker, of Watertown, Conn.: I claim the manner essentially described of attaching the shafts to two-wheeled vehicles, whereby said shafts may be operated in the manner and for the purposes set forth.

June 26.—IMPROVEMENT IN ATTACHING WHIFFLETREES TO SLEIGHS.—A. P. Hutchinson, of Pembroke, N. H.: I claim arranging the whiffletree so as to project beyond one of the thills, in the manner described. I also claim the application of the whiffletree to the thill-bar, by an adjustable slider or its equivalent. I also claim the arrangement or combination of the spring tops, c d, with the thill-bar and the adjustable slider applied thereto, and made to support the whiffletree, substantially as specified.

IMPROVEMENT IN ADJUSTABLE CARRIAGE SEATS.—J. A. Naylor, of Rahway, New Jersey: I claim the jointed and branched bars, C C, and the rod, N, in combination with the slots or slides J, and the seats, a and b, when constructed substantially in the manner described.

IMPROVEMENT IN SELF-ACTING WAGON-BRAKES.—Wm. May (assignor to J. De Bringe, E. A. Ramsey, and W. W. Ramsey), of Winchester, Ohio: I claim, first—The chair, I, operating in connection with the slotted tongue-piece, D, when operating reversely upon the same lever with bar, C, for the purpose described.

Second—I claim the construction of the bar, F, and the plate, G, adopted to stops, *k*, *l*, arranged and operating substantially as set forth, being for the sole purpose of reversing the action of self-acting wagon-brakes, in combination as described.

July 3. AN IMPROVEMENT IN STEAM LAND CARRIAGES.—C. H. Baker, of Red Wing, Minn.: I claim, first—The arrangement of means set forth, for connecting the engine frame to the frame or body of the carriage.

Second—The arrangement of means, as set forth, for allow-

ing the inside wheel to accommodate itself to the movements of the carriage in turning.

An Improvement in Odometers.—A. T. Howard, of Hartford, Vt.: I claim, first—The cam-shaped tooth, G, constructed and combined with a toothed wheel, in the manner described, to impart an intermittent motion to the said wheel, and prevent its rotation at other times.

Second—The combination and arrangement of the plate, D, eccentric pawl, E, and ratchet wheel, G, for the purposes set forth.

An Improvement in Detaching Horses from Vehicles.—A. B. Johnson and M. H. Vaughan, of Clarksville, Ark., and J. Stinnett, of Shelby Co., Tenn.: We claim attaching the pole or thills of a carriage to the front axle by means of the lugs, *h*, which fit into triangular recesses of the brackets, F, the latter being secured to the front axle, substantially in the manner described.

We also claim, in combination with the thills, K, lugs, H, brackets, F, bolts, H, and rock-shaft, G, the lever, L, for operating the bolts, K, substantially in the manner described.

We also claim giving the lever, L, by which the rock-shaft, G, is operated, a curved shape, so as to embrace the hub of the wheel when operated, and to arrest the motion of the carriage, when the horses are detatched therefrom, substantially in the manner described.

July 10. An Improved Paint Can.—J. W. Masury, of New York city: I claim the combination in the manner shown and described, with the wooden cover, B, and the head of the can, A, of the hook-shaped straps, C, for the purpose set forth.

An Improvement in the Running Gear of Vehicles.—Richard Murdoch, of Baltimore, Md.: I claim, first—The combination of the curved braces, F F, with the bed, C, and plates, H H, substantially in the manner and for the purpose described.

Second—The combination with the bolt, N, of the slide-piece working in the slot, O, in the manner and for the purpose specified.

An Improved Machine for Bending Wood.—Frederick Seidle & Samuel Eberly, of Mechanickburg, Pa.: We claim, first—The combination of a revolving yielding pressure pattern, with an unyielding sliding bed, arranged substantially as described, for the purpose set forth.

Second—Attaching the pattern to the frame, substantially as described, so that it can be removed by simply drawing it out without unloosing any bolts.

An Improvement in Tuyers.—S. P. Talman & N. F. Blodget, of North Orange, Mass.: We claim the improved tweer as constructed with a valve opening, H, and valve, K, arranged on or applied to the air case, so that the said valve shall not only close upon the opening by the force of the blast from the induction pipe, but on cessation of the blast move away from such opening and permit air to enter the case and pass from thence into the mass of fuel.

July 17. An Improvement in Setting Axletrees.—J. N. Arvin & S. H. Perkins, of Valparaiso, Ind.: We claim an improved mode of setting axletrees and giving them the required pitch and "gather," by means of metallic set screws, rests and sets, or their equivalents, as exhibited and described by the specification.

An Improvement in Attaching Thills to Vehicles.—L. C. Miner, of Hartford, Conn.: I claim the projection on the bolt, D. and the arrangement and insertion of an elastic and compressible substance in the countersink of the jaw or jaws of the clip, A, all in combination in the manner substantially and for the purpose as set forth and described.

An Improvement in Detachable Whiffletrees for Vehicles.—Ignaz Ramminger, of New York city: I claim the use or employment of the rods, G, G, provided with the right-handed (I) and left-banded (J) screw-threads, in combination with the spring, O, strap, R, provided with handles, S, hub, L, and axle, B, when the same shall be arranged and operated in the manner described and for the purpose set forth.

An Improved Felly Machine.—F. W. Mallett (assignor to G. F. Kimball), of New Haven, Conn.: I claim, first—The combination of the hook, E, with the cutters, N, N, &c., with the guide or rest, F, when constructed, arranged, and made to produce the result, substantially as described.

Second—I claim the combination of the cutters, N N, &c., with the guide or rest, F, when the whole is constructed, arranged and made to produce the result substantially as described.

July 24. An Improved Wagon-Brake.—H. H. Bennet, of Hunt's Hollow, N. Y.: I claim the arrangement of the hinge, E, in combination with the reach, E, and brake-head, G, constructed and operating substantially as and for the purpose set forth.

An Improved Self-acting Sleigh-Brake.—Jacob Dutcher, of Gibson, Pa.: I claim constructing the roller to which the draft-pole is attached, so as to act like a crank, as set forth, in combination with the longitudinal rods, *m m*, cross-rod R, lifting rods, H H, bars, B B, and the knives or shoes, K K, the whole arranged and operating substantially as set forth.

An Improved Machine for Registering Fares.—M. W. Helton, of Bloomington, Ind.: I claim, first—The arrangement of a slide, E, or its equivalent, in combination with a rotary shaft, F, and stops, D, or their equivalents, constructed and operating substantially as and for the purpose described.

Second—Combining with the slide, E, two series of stops, D and J, and a series of registering wheels, K L M N, or their equivalents, substantially as and for the purpose specified.

An Improvement in Couplings of Thills for Axles.—John McDermott, of Washington, D. C.: I claim the end washers, E E, upon the shoulders or sleeves, D D, of the shaft-iron head, as set forth.

I also claim the curved segmental shoulders or guards, *m m*, on the lugs of the clip, in combination with said end washers and sleeves, D D, as set forth.

An Improved Coupling of Thills to Axles.—Robert Morrison, of Rahway, N. J.: I claim the combination of the swivel-loop, *b*, the spring-latch, C, and the clip, A, in the manner set forth.

An Improvement in Wagon-Brakes.—H. W. Norville, of Livingston, Ala.: I claim the combination of the draught-pole, D, and lever, E; the latter being connected with the brake-bar, G, and all arranged to operate as and for the purpose set forth.

An Improved Compensating Lever-Spring.—Wm. S. Pratt, of Williamsburgh, N. Y.: I claim the arrangement and combination of the levers, A A and B, substantially as and for the purposes set forth.

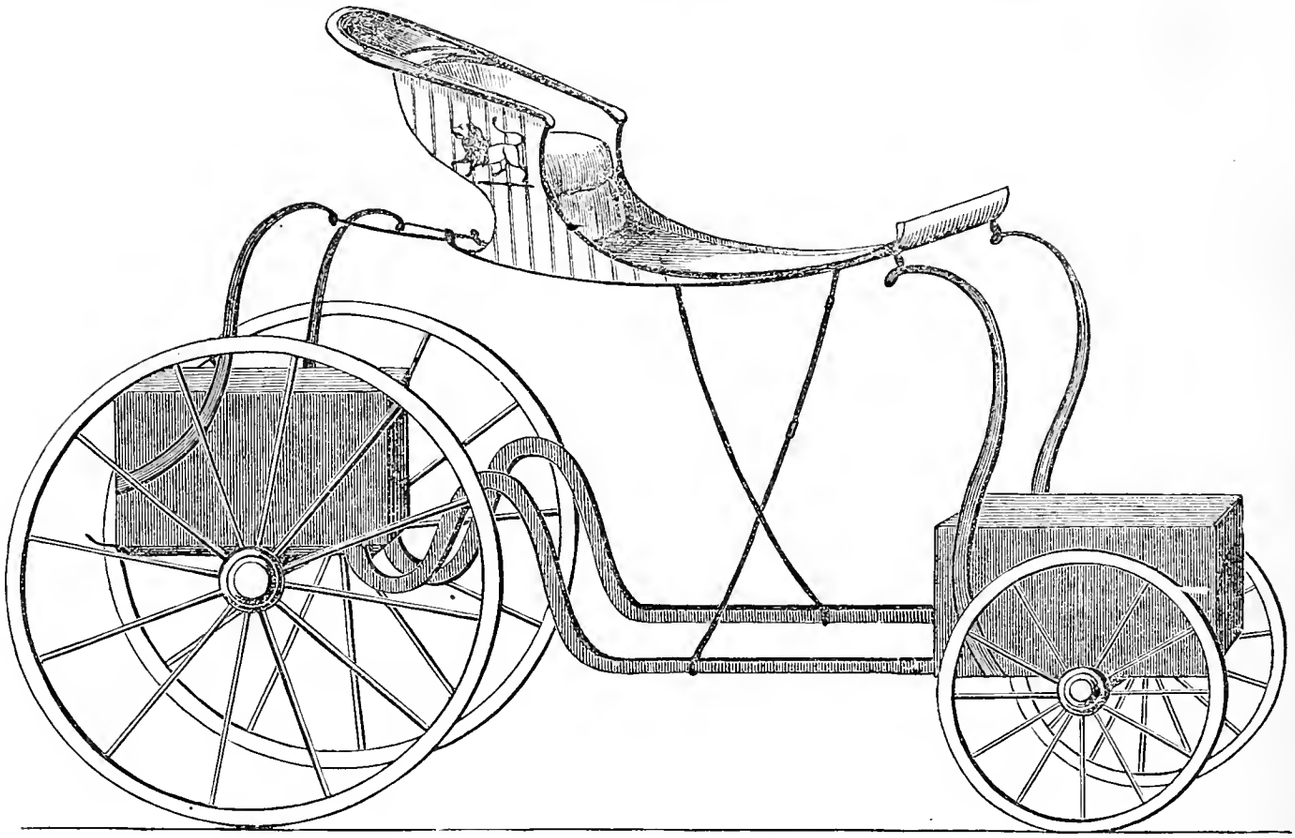
An Improvement in Adjustable Carriage Springs.—George Palmer, of Littlestown, Pa.: I claim placing india rubber, or an equivalent yielding substance, between elliptic springs for vehicles, and a similar substance on the top of the bolster or rocker, or underneath the axle-tree, in combination with a regulating screw and hand or thumb-nut, all arranged substantially as and for the purposes specified.

An Improved Mode of Detaching Horses from Vehicles.—J. M. Roberts, of Plaisance, La.: I claim, first—The combination and relative arrangement of swingle-tree, G, vertical cockeyes, C, cockeye-pin, A, lifting bar, R, cord, F, and tube, H, substantially as and for the purpose set forth.

Second—The combination of a perforated tongue, N, and perforated crab-iron, O, crane, J, bolt, I, cord, H, and tube. T, with the swingle-tree, G, vertical cockeyes, C, cockeye-pin, B, lifting caps or bars, R, cord, F, and tube, H, substantially as and for the purposes set forth.

An Improved Coupling for Thills to Axles.—James Sadler, of Egremont, Mass.: I claim the application of the bolt connecting the shafts or pole of a carriage with the band or clip attached to the axle of a pair of hooked clasps, contrived to shut over and encircle such bolt, which bolt may be permanent (allowing sufficient play, merely, for the raising and lowering of the shaft or pole wherewith said clasps are permanently con-

THE CURIOSITIES OF COACH-MAKING.—NUMBER TWO.



"Quiet Good Taste."—Our cotemporary in London told us, recently, that American carriages show "an absence of quiet good taste, a want of proportion, a deficiency of that solid, substantial quality that forms the characteristic of an English carriage." We are pleased to find, from a private source, that our critic stands alone, or, at least, that the majority of the craft in the mother country do not sympathize with his views. But we confess that the "idea" embodied in the term "*quiet-good-taste*," has puzzled us exceedingly. Fortunately we have stumbled upon something which we think expresses the meaning more fully than could be done by any words in the English language; and that our readers may share in our pleasure, we have had the *thing* engraved—*at great expense!* It is a draft of the *coach* in which H. R. Highness the Prince of Wales, *accompanied by a lady of quality*, proceeded to the Ascot races, in 1785. The *quiet good taste* will be found in the contrast between the front and back wheels. But alas! while we write we fear that *good taste* in England is departing, for on inspecting the drafts of our cotemporary we find that during the past seventy-five years they have degenerated nearly as much as have the Yankees, and are making their wheels—all four—more nearly of a size than formerly. *O tempora! O mores!!* The *only* thing left is the "solid, substantial quality," in which profundity we are lost—*shut-up!*

nected) and kept in place by a band and spring, by means of which the whole may be securely held, or, if desired, may be readily detached.

RECENT EUROPEAN PATENTED INVENTIONS.

January 23. Francis J. Ferry, Rupert street—Improvements in harnessing horses or other animals to carriages or vehicles.

January 24. Leon E. David & Jean A. Vercher, 29 Boulvard St. Martin, Paris—Improved break for vehicles.

January 27. Poncon B. Jeandelize, Bonsecours, Rouen, France—An improved eye-flap, designed to stop horses which have taken fright, by depriving them of sight, and which he calls a "blinding eye-flap," for which he has obtained in France a patent for invention and improvement for fifteen years, bearing the date of the 19th of August, 1859.

CHARLES C. DUSENBURY,

DEALER IN EVERY DESCRIPTION OF

Coach and Carriage

HARDWARE & TRIMMINGS,

No. 161 BOWERY (near Broome St.), N. Y.

Carriage and Wagon Manufacturers will find at this house all the materials they may require in their line of business, at the lowest prices, and on accommodating terms, such as Axles, Springs, Bolts, Hubs, Spokes, Felloes, Shafts, Bows, &c. Also, all kinds of Patent Leathers, Cloths, Damasks, Silks, Carpets, Threads, Tacks, Curled Hair, Moss, Varnishes, Japan, &c. These goods are selected with care, and with the express end in view of giving satisfaction to the public.

Silver and Brass Plating done.

☞ Orders through the mail, when accompanied with the cash, or satisfactory references, will receive immediate attention.

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, OCTOBER, 1860. No. 5.

The Coach-maker's Portrait Gallery.

For the New York Coach-maker's Magazine.

BIOGRAPHY OF ROBERT B. CAMPFIELD, Esq.

(WITH PORTRAIT.)

THERE are few themes more delightful to contemplate than the life of an old man, who, after battling with difficulties and contending with opposition, looks back upon a life well spent, and upon duties well performed. The little blessings conferred upon a community, and the frequent acts of benevolence and kindness are often treasured as most precious legacies. Such a retrospect is indeed most pleasant; and happy he, who, in the evening of life, has the consolation of knowing that he is at peace with God and his fellow-men. His lessons of warning and words of praise may well be remembered by the youthful aspirant, for they are the experiences of a lifetime, and by such teachings is he enabled to avoid the rocks upon which so many of life's mariners have been wrecked. Few there are who would not wish to *read* of such a character, but when the living example is presented, and the very actor, a new interest attaches itself to his words, and even the manner of utterance and the tone of voice are recalled long after he is laid under the clods of the valley, and the tabernacle of clay has become as an handful of dust.

ROBERT B. CAMPFIELD, the subject of this sketch, was born in the vicinity of Newark, New Jersey, February 15th, 1770, and is consequently over ninety years old. Descended from one of the founders of Newark, he has always preserved that stern integrity and well-directed energy which characterized the early settlers of this city, and his sympathies have ever been enlisted in any scheme which had for its object the welfare of his State and city, or improvement in his own department of industry. His early educational advantages were confined to the instructions in a district school, where he made becoming proficiency. As he showed a taste for mechanical pursuits, he was apprenticed to David Grummon, with whom he remained until his majority. After leaving his employer he walked to New York city, purchased the tools requisite in his trade, returned to Newark on the same day, and thus entered upon his career as an independent manufacturer.

During his apprenticeship an incident occurred which is characteristic of the man. A gentleman passing through Newark in a carriage imported from England, remained a few days at the village tavern. This carriage attracted the attention of Mr. Campfield, who was captivated by its symmetry and perfection of workmanship, and such was his interest, that all his leisure moments were occupied in examining its construction. The carving particularly pleased him, and he took accurate measurements and drafts of the entire carriage-part. A prominent feature in his carriages were the beauty of the carriage-part and the carving, to which branch his individual attention and skill were devoted.

His first business engagement was with Gen'l Cummings. Mr. Campfield very recently speaking of this, says,—"My first job was making 100 wheelbarrows for Gen'l Cummings, at twenty-seven shillings and six-pence each. Although he was very much opposed to me in politics, he was still one of my best friends. I never had a better job, for the payment was prompt and ample, and the work was perfectly satisfactory to both parties."

Soon after this he received a contract for the repairing of stages, which at that time formed the only means of communication between New York and Philadelphia, but through political chicanery a substitute was afterwards found. At this juncture Mr. C. applied to a leading New York coach-maker, and, with difficulty, obtained from him orders for carriage-parts. The unwillingness of the manufacturer proceeded from a want of confidence in the ability of a country wagon-maker to produce an article combining sufficient durability, artistic taste, and finish. At this period our entire country was dependent upon Europe and European workmen for almost all pleasure carriages, from the full paneled coach down to the phaeton. Mr. C., however, obtained permission to make a sample carriage-part, which, when completed, he took to the city. Such was the excellence of the work that the manufacturer not only paid him a sum beyond his price, but also gave him unlimited orders for the same kind of work, thus securing Mr. C.'s services, and bestowing upon him a substantial proof of the appreciation of his merit.

The business of that day was conducted by mechanics who divided their time between the shop and farm. The various branches were conducted in different and remote

localities. A goodly citizen of Newark wishing to purchase a wagon for the use of his family, would call upon the wood-workman, and, perhaps, find him on his farm with his apprentices, engaged in plowing, mowing, or harvesting. The object of the call being made known, the customer and manufacturer returned to the shop, and after much calculation, the expense and style are ascertained. With this information, our worthy citizen having mounted his horse, takes with him a rough charcoal sketch on a board, and intended to represent his family carriage. His old horse pacing along brings him at the end of a mile or more to the blacksmith's shop, and here he continues his negotiations for another indispensable part of his plan. Having ascertained the expenses of ironing, after another circuit he arrives at the village painter's; and learning the qualities and quantities of English white lead, the different colors, length and breadth of the stripes, obtains another item of necessary expense. In short, the wheelwright and trimmer are visited in the same manner; this occupying the greater part of the entire day. The wagon having been completed, under the cushion of the seat is plainly written in old-fashioned letters, in black paint, the name of each mechanic, thereby circulating their cards, and indorsing their responsibility for their portions of the work. Our good friend having taken possession, and highly pleased (as who would not be?), returns home and having drawn out an old stocking, well lined with Spanish dollars, pays each his full amount.

Mr. Campfield believing in the truth of the maxim that "time is money," saw the inconvenience of such a method of carrying on business, and endeavored to devise some plan, by which all these different and distinct branches might be consolidated. One obstacle arose from the changes of residence of the mechanics, and their adaptation to new kinds of work; and another source of anxiety was the necessity of a large capital required in an extensive manufactory. Although thus surrounded by such obstacles, he nevertheless persevered until he accomplished his design. With a master mechanic at each of the branches, bodies, carriages, wheels, blacksmithing, painting and trimming, he entered upon more extensive business operations, and turned his attention to the manufacture of coaches.

(*To be continued.*)

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

(*Continued from page* 25.)

CHAPTER III.

The steamer that took us on board at the plantation, reached "Tuscumbia Landing" without accident, and, taking seats in a hack, we were conveyed to the town proper, a mile distant. We found a very good hotel at which we secured quarters, and then sallied forth to view the place, which is somewhat noted among tourists for its springs, or, more properly speaking, it subterranean river, of which the so-called springs are mere outlets. This stream emerges into daylight from a low, natural arch, or cave, in the face of a cliff, and it was long supposed to be a spring, though it was thought somewhat strange that when the water of the Tennessee a mile or more distant, was muddy, the water that issued from the rock was in the same condition. This problem was at length solved by the discovery of a cave at the bottom of a deep gorge near the town, for, on exploring it, a river was found half a mile from the entrance, the course of which corresponded exactly with the above described outlet. The river can be followed under ground for miles, which shows that it does not come in a direct line from the Tennessee; but there is no doubt that its source is somewhere on the banks, or in the bed of that stream, as is proved by corresponding floods and low water in each. I have never seen any mention made of this natural curiosity in any of the thousand and one books issued by tourists; and I think this fact is rather strange, when one considers the uninteresting subjects that cumber many of their pages. Just think of it, ye traveling scribblers—ye wanderers among nature's wonders! Here is a glorious theme without a bard.

The spirits of my comrade were at a very low ebb, and it needed but little penetration to divine the cause; it was the loss of his tool chest—rather a serious matter, by the way, to a man out of money. It was true that mine had shared the same fate, but my case was not so bad as his by half, for I had the means of replacing mine and he had not.

"You said that you expected to get work in this part of the country," I remarked as we left the hotel, "what is the name of the place?"

"Spokesville," was the answer.

"Spokesville!" I repeated in surprise. "Why, that is the very place that I intended to go to. I rather think we both came out here on the same errand. Did you see an advertisement in a Cincinnati paper for a hand?"

"Yes, that's what brought me here. I was out of work and getting short of funds, so, when I saw the advertisement I concluded to try my luck in the South; but I would'nt have got thus far if it had'nt been for your generosity."

"And would'nt have lost your tools," I added.

"Nor seen my dear, delightful uncle," continued he, a flash of the old humor lighting up his face.

"Well, well," I said, "we will make the best of our misfortune. I have money enough to buy tools for both, and, if we get work, must 'pitch in' so much the harder to make up our loss. We will visit the shops here,—there are two, I believe,—and see what the prospect is in this place."

In both establishments we were courteously received by proprietors and workmen; no hands were needed, but we were informed that without doubt we could get employment at a town called Tireville, some forty miles distant. The proprietor of a shop in that place had written to them to send him the first body-makers that came along. The job at Spokesville, they said, was hardly worth having, as it would not last but a few months; the shop only did a small business, and they would advise us by all means to go to Tireville, where the pay was prompt and prices good. We concluded to take their advice, but thought it prudent to write before undertaking the journey, and ascertain beyond a doubt that the places were not already filled. So we dispatched a letter requesting an immediate answer; and during the interval we bought new kits of tools, and occupied ourselves in putting them in order at one of the shops, where permission to use the

grind-stone and a vacant bench was kindly granted us. A week elapsed, and during that time we made many agreeable acquaintances among our fellow-craftsmen, all of whom we found to be of the right stamp—good fellows and good workmen. Upon hearing that we had lost our tools by the wreck of the steamboat, they generously raised a handsome contribution among themselves, and offered it for our acceptance. Acting as spokesman for both, I warmly thanked them for the offer but declined receiving the money, assuring them that we had sufficient for all our wants. This little episode occupies a green spot in my memory that time can never sear, and, to the honor of the coach-making fraternity be it said, such exhibitions of generosity towards unfortunate brothers are by no means rare.

The expected letter arrived in due time, and it was all that we could desire. Employment was offered to both of us at first rate prices; so we were content, and secured seats in the first stage for Spokesville.

Most people in this fast age consider the old-fashioned mode of traveling by stage-coach a bore, but I do not. On the contrary, when one has any curiosity to see the country through which one is journeying, it is just the thing. As neither of us had ever been south before, we had our eyes open and enjoyed the trip hugely, and din'nt growl as some of the passengers did, because the driver persisted in walking his team up all the hills and allowed them to trot leisurely down again. It gave us a chance to view the quaint verandah'd dwellings of the planters, with their nicely whitewashed "negro-quarters" in the rear; we could closely scan the cotton and tobacco plants in their native soil, and exchange grins with the troops of dusky "field-hands," who leaned upon their hoes or stopped their mules to gaze after the passing coach; we could exchange nods and hat-liftings with lazy-looking overseers, sitting on lazy-looking horses, under trees whose cool shade was doubtless refreshing enough to make any living thing lazy on such a hot, sultry day as that was. And better than all that, we had time to get acquainted with our fellow travelers, and agreeable people they proved—people of whom one could ask fair, pertinent questions without being snubbed; in short, people who "went in" for making the journey a pleasure trip, and succeeded.

Just as the last strip of golden light, that marked where the sun went down, was turning to a deep purple, we reached our destination. The place, like all the smaller class of country towns, consisted of one principal street—the turnpike—with off-shooting rows of dwellings ranged to mark where other streets would run when time increased the population. On either side of the chief thoroughfare were the stores, each with its little knot of pipe-smoking, straw-hatted, after-supper loungers, who stared through clouds of tobacco smoke at the passing stage. Near the center of the town, three or four dilapidated buggies standing by the side-walk in front of a brick building suggested that *there* was the carriage shop. Glancing upwards as we passed, we saw painted in black on a white ground the words, "T. B. Bright, Alabama Carriage Factory." My companion and I exchanged significant glances, and looked with renewed interest at the building, and the three or four idlers who stood in the door-way. A little farther on was assembled a mixed crowd of white, black, and yellow natives, about a door over which were the words "Post Office;" here we stopped, and the mail-bag was tumbled from the roof of the coach.

"Any news, Tom," said a short, pursy, red-nosed man, addressing the driver, and grunting under what seemed a hopeless attempt to shoulder the bag.

"Yes," was the answer, "lots o' noos; Old Buck 'clares to goodness he aint a goin' to keep nary postmaster in office wot drinks more'n a gallon o' whiskey a day, cos, he says, they can't afford it and be honest. Ga lang! hip!"

The whip cracked, and amidst a roar of laughter from the bystanders, we rattled away towards the hotel, the huge post and swinging sign of which was visible a little farther up the street. The intervening distance was soon accomplished, and our journey was ended. Entering the bar-room, we proceeded to register our names, secure a room, and make all the necessary arrangements our comfort required. On leaving the desk, I noticed a pleasant-looking, brisk little gentleman step up to the register and scan it for an instant, and then stepping up to me he asked politely, if my name was Bradly. I answered in the affirmative, upon which he informed me that his name was Bright, proprietor of the "Alabama Carriage Factory;" whereupon we shook hands, and I introduced him to Henry Burnet; then the little man took our respective arms, and marching up to a group of persons standing by the door, he introduced us all around. Several of the party proved to be his employes, and our reception was very cordial indeed. Upon inquiring if there were any private boarding houses in town, we were answered in the negative; but board, we were informed, was cheap at the hotel, and those of the hands who were unmarried made it their home. At this juncture the landlord appeared to announce that supper for the stage passengers was ready, and Mr. Bright, who seemed to have a passion for giving introductions, presented us to him, and we soon concluded negotiations for board. Promising to visit the shop in the morning, we said good night to the party, and went in to supper, after which, we retired to bed, our ride having fatigued us to a degree that rendered repose desirable.

After breakfast next morning we repaired to the shop, and were welcomed at the door by the sprightly Mr. Bright, who conducted us over the premises, and introduced us to those of the hands we had not seen at the hotel the previous evening. In the wood-shop we found three white men and a negro, the latter employed on repairing exclusively. One of the former on common bodies, another on wheels, and the third on carriage-parts. There were two vacant benches which were assigned to us, and upon examination we found them to be in excellent order, with good vices and tool-racks. Those who were to be our shop-mates appeared to be pleasant sort of men, with, perhaps, one exception—the body-maker, whose name was Horn. This man had one of those massive, tallow-complexioned faces that, when in repose, are devoid of expression, and are seldom interesting, but often repulsive. Although he tried to look amiable when he greeted us, he did not succeed, at least, to my satisfaction, for the smile that played faintly about his large, sensual mouth, was blighted by the sly, snaky gleam of his wandering, black eyes, that seemed alternately employed in counting chips on the floor, and taking our measure for pantaloons—they never got higher than the waistband. *Honest* eyes generally look above the coat collar. There was a peculiarity in his voice, too, that I do not like in

any man; it was soft and silky without being musical, and was always pitched in a low key, as if it's owner was eternally afraid of eavesdroppers, or of talking himself into a galloping consumption. Save me from all such voices! Good men may have them, but if I had a dear friend with a vocal organ of that kind, I would counsel him to take to peddling charcoal, or making stump-speeches in the spread-eagle style of oratory, in order to train his voice into a christian key. The smith-shop was next visited, and there we found a couple of hammering sons of Vulcan, assisted by a brace of the darkest kind of darkies. There was also a repairing fire presided over by negroes, who were then out in the yard punching with long sticks a circular fire, in which they were heating tires, and their swarthy, perspiring hides and grotesque contortions of face, caused by the heat, were suggestive of certain operations supposed to be performed by the satelites of his satanic majesty in the pyrotechnic hemisphere. On the upper floor we found the painting, trimming, and harness shops; the latter was a new feature to us, but we learned that most of the Southern carriage shops make the manufacture of harness part of their business. The principal painter was a German, named Oversmasher, who had worked for several years in Western New York; and when he found that we came from that State, he overwhelmed us with a perfect inundation of questions about "All-pany," and "Puffalo."

"How do you like this part of the country, Mr. Oversmasher?" I asked.

"Oh, I ton't likes dis contree," he said, smiling, "dey ton't makes no lager-peer, unt so I has to trink whiskey, witch is not coot. Ven I is try it schust makes me tryer, den I kits mat, unt trinks it town like vater, unt it makes me so sick like a tog, unt my head schwells up so pig as a punkins, ha! ha!—it is pat schtuff. I wout kiff ten tollers for a callon of goot lager schust now—ah! der lager is te pest trink for me!"

"He is a true Ditcher," said I to Mr. Bright as we descended to the repository; "he can't get along without his lager."

"If I was'nt a temperance man from principle," replied the proprietor, "I would send to Louisville and buy a barrel for him; but I know that if I did, he would'nt draw a brush while it lasted. I like the Dutchman very much, he is always good natured and full of fun—but he will drink and get tight. What do you think of his work?"

"It looks very well, I answered, "as far as the surface is concerned, but I don't fancy his style of ornamenting—the coloring looks tolerable, but the drawing I think defective."

"And I dont like the size," interposed Henry, "his roses are big as cabbages."

Bright laughed, and said they suited the taste of some of his customers, who generally wanted *all* they could get for their money. "The 'Ditcher,'" he continued, "is very tender on the subject of his skill as an ornamenter, and thinks himself the most accomplished artist this side of the mountains. The consequence is, he often gots mortally offended. About three months ago I built a Rockaway for an old planter who lives near this place, and as we were bothered with more orders than we could fill promptly, the job did not progress very fast; so, the planter very often called in to hurry us up. One day he entered the office, and I conducted him up stairs to the paint-shop, to see the body, which was striped and ornamented in Oversmasher's best style. He looked at it for some time, and the Dutchman, thinking that he looked pleased, sought to draw him into saying as much in words, for it tickles him mightily to hear his work praised."

"How you likes der bainting, maister Schmit?" said Oversmasher.

"Wall," answered the old man, "I like it fust rate. Them ar yaller streakes look 'mazing nice, and so's them flip-giggers in the corners; but I don't think them y'ears on that ar mule on the door are long 'nuff—do you?"

"*Mule!*" yelled the painter, frantically; "dundree vitter! dat is no mules, it is a *tog;* don't you see his tail durned upon his pack?"

"Yes, I seed *that*," said the other, "but I thought it was a bush to keep the hoss-flies off—I did, sartan."

"Up to this point I had controlled my countenance, but the *bush* did the business, and I fairly screamed. Oversmasher was the maddest man I ever saw, and I verily believe he used up all the curses in the German language. If you want to see all the jollity driven out of his face in an instant, just say *mule* to him—he'll explode like gun-powder."

A couple of negroes were dispatched to bring our tools from the hotel, and we set about arranging and putting them in order, making some that we could not buy, getting out patterns, and selecting lumber. In two days we got everything in tip-top order, and the way the sawdust and shavings flew was'nt slow. Weeks flew by and we got along finely. Henry Burnet proved a good workman, and, though I considered myself fast, he kept even with me. Our work suited the "boss" exactly, and he was not slow about saying so, much to the annoyance of Horn, with whose bodies he occasionally found fault, both in shape and workmanship. The man was a passable workman, but he had a way of rushing things together that was far from honest; and Bright easily discovered this when he compared his work with ours; indeed, he could not have detected it otherwise, for he was not a mechanic himself. This made Horn sulky, and he would often sneer at what he was pleased to call our "new fangled style of putting work together," declaring that it would ruin the trade, "putting on so much extra work for the same price." This, and certain sneaking ways of his, made us distrust the man's open professions of friendship. So they were met rather coldly, and it was not long before he ceased to conceal the fact that he hated us cordially. Jones and Hamilton, our other shop-mates, were of a better stamp, and the most friendly relations sprang up between us. Sam, the darkey, was clever, as most of the real black fellows are—your spurious yellow chaps will bear watching—and he "toted" water, turned the grindstone, and heated glue with the most obliging readiness.

The holidays were approaching, and Mr. Bright, in accordance with a time-honored custom, was to give a grand party to his employes, and other friends and acquaintances. We were invited, and, judging from reports of previous ones, it promised to be a rich affair. "You will see," said our "boss" to me, "how we do these things out here in Alabama. We go in for fun in a style that would shock the conventional snobbery of upper-tendom in other places." Well, we went, and there *was fun*, as you shall see in the next chapter.

(*To be continued.*)

For the New York Coach-maker's Magazine.

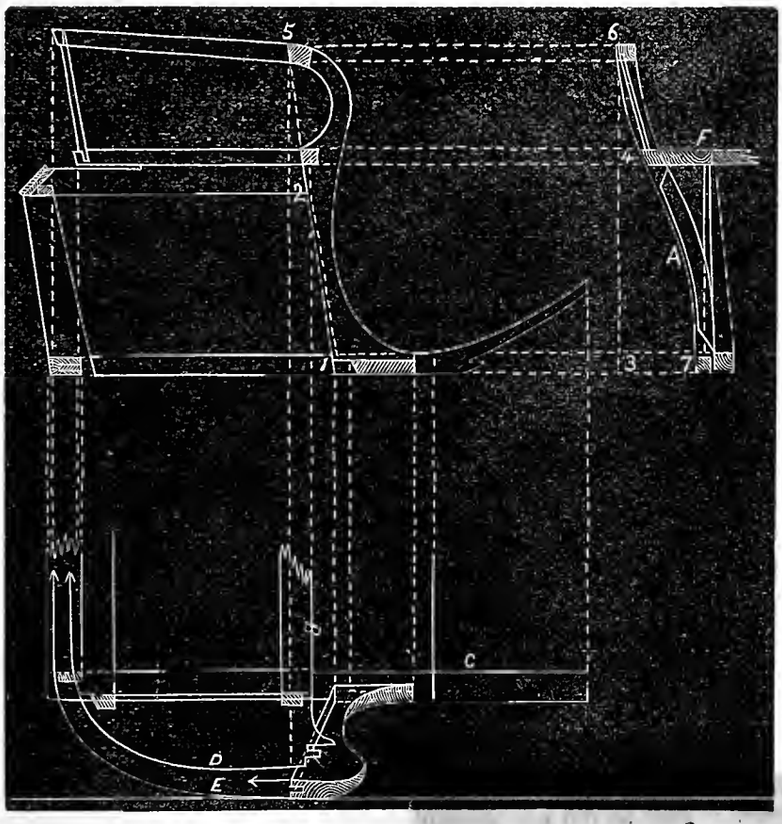
THE PALM TREE AND THE GOURD.

BY MRS. L. H. SIGOURNEY.

An Eastern gourd aspiring wound
A lofty Palm tree's form around.
"How old art thou?" the intruder cried.
"A hundred years," the Palm replied.
"*A hundred years!* and have they flown
While thou hast yet no taller grown?
Lo! ere a few short moons have fled,
My tendrils tower above thy head."

"I know it well. Each summer sheen
Just such a parasite hath seen,
As boastful o'er the ancient tree,
And as short-lived as thou shalt be."

Hartford, Conn.



STANHOPE BODY WITH PLAN AND SHAM DOOR.—SCALE $\frac{3}{4}$ IN.

ENGLISH CARRIAGE ARCHITECTURE.—NO. V

Americans can have but little use for this diagr
but being one in the series from the *Carriage Buil*
Art Journal, we do not feel like passing it by altoge
It is very simple, and requires but a brief explanatio

1*st.* Get the distance as shown on the body and mark it on the cant, as shown from 3 to 4.

2*nd.* Then take the distance from 2 to 5, and lay it down on the cant, as shown from 4 to 6.

3*rd.* Then get the turn-under of the sham doors, as marked from 3 to 7.

4*th.* The top rail is shown on the cant, and also the seat.

A, represents the outside of the sham-door; B, the front of the seat; C, the inside of the bottom-side; D, the outside of the seat; E, the outside of the top-rail, and F, the seat-rail.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACHMAKER IN THE WESTERN COUNTRY.

(*Section III. on page* 68 *concluded.*)

It was a lovely October morning when we drove round in front of the hotel, where a goodly number of friends and acquaintances were assembled to witness our departure. After many promises to write, and many wishes for a pleasant trip, we shook hands all around, cracked the whip, and started off.

Reaching the National road, we found a smooth, solid pike, over which we journeyed at the rate of fifty miles per day. Many incidents, pleasant at the time from the variety they occasioned, were interspersed along our route, one of which I cannot forbear mentioning, for even now the memory of it lingers like a sweet dream of other days. I will copy it from my journal.

"*Oct. 7th.* About the middle of the afternoon, as we were proceeding leisurely along some twenty miles west of Indianapolis, we noticed a country tavern, charmingly situated amid beautiful shade trees and blooming flowers. Arriving opposite the gate we heard sounds of music issuing from the parlor, and as we were wearied with rapid traveling, we determined to stop for the day. Jumping from the buggy I passed up the walk, ascended the steps, and rapped on the open door. A moment afterward light footsteps were heard in the room, and then a fair young girl entered the hall. Bowing low, I asked if two travelers could find accommodation there? 'Certainly, sir,' she replied, 'walk in, and I will call pa.' Promising to accept her invitation soon as possible, I returned to the buggy, and after seeing our baggage stored away, we entered the parlor, where we found the young lady who met me at the door, and a younger sister. After a few common-place remarks on the weather and surrounding country, I turned to the elder sister, and said, 'I trust you will pardon us for interrupting you in your musical exercise, and if agreeable, I should be pleased to have you continue it.' Without the many apologies and excuses which fashion has entailed on custom in refined circles of society, she answered my request by proceeding to the instrument, and requesting her sister to accompany her

[illegible]s. The
[illegible]ices of
[illegible]after
[illegible]said,
[illegible] close with,' and striking up a slow, melancholy air, they sang the 'Dying Californian.'

"'Beautiful!' exclaimed Worthington, as [illegible] trembling sounds died away. 'Beautiful!' [illegible] an absent manner.

"I am passionately fond of vocal music. While listening to some low, sweet melody, I have unconsciously shed tears. I've listened to Jenny Lind in her happiest efforts; I have heard the most celebrated opera troupes chant their sublime oratorios; yet there was something in these humble, backwoods girls that excelled them all. There was a depth and richness in their voices such as we

seldom find; naturally excellent, they had been improved by cultivation, so that every articulation was clear and distinct, besides possessing the power to express different emotions of the heart,—now light and joyful as the sound of running waters, then dark and gloomy as the soul of a friendless wanderer. How sweetly, and with what deep pathos did they sing the lines,—

"'Listen, brother, catch each whisper,—
'Tis my wife I'd speak of now;
Tell, oh tell her, how I missed her,
When the fever burned my brow.

"'Tell her, brother,—closely listen,
Don't forget a single word,—
That in death my eyes did glisten
With the tears her memory stirred.'

"I am no musician, yet there is music in me. I can feel it sweep through my very soul, touching some of the finer chords of my nature, when I hear a sweet, clear voice singing a low, simple song.

"When they had finished, we all remained silent for a few moments,—our thoughts were too exquisite to be broken by words; but as soon as the silence became embarrassing, I arose, and said, 'If agreeable, let us take a short walk; it is too pleasant to stay in-doors. Will you go, Miss Evelyn?'

"'Certainly, sir, with pleasure,' she answered, and getting her bonnet, we were soon ready. After tarrying in the yard awhile to admire the different flowers and shrubs, we passed out the gate, and walked leisurely down the road. But why linger here? why attempt to narrate our conversation with these simple-minded, but pure, warm-hearted girls? it will soon pass away and be forgotten by all, save one.——"

Such is the record; let us pass on.

Leaving the low, swampy bottoms of the Wabash, we gained the broad prairies of Illinois, and journeyed rapidly over the smooth, level roads until the Illinois river was reached, where my companion was to leave me. Tarrying over night with his friends, I bade him a warm adieu in the morning, and continued my journey alone. And thus we parted—parted as thousands have done before and since; remembering each other for a time, until new associations and strange scenes quenched the last smouldering sparks, and then the hand would sweep across the tablet of memory and erase the name. Such is what the world calls friendship. Truly has one of our favorite poets said,—

[illegible]

For two days I traveled by myself. Worthington his lively humor had kept me light-hearted and jovial, but now that he was gone I felt very lonely. Where I was going I knew not. I had no place, no object in view. I was, in fact, a football to be kicked wherever destiny willed it. At the close of the second day I entered a small village, and in passing along the principal street to the hotel, I was so well pleased with the appearance of everything about me, that I determined to remain there a day or two, and form some decided plans for the future. The village was situated on the arm of a prairie, consequently was surrounded on three sides with timber,—beautiful groves of young hickory and oak. The dwellings were all built a little distance from the street, so as to leave room for a small yard in front, while shade trees and flowers added their charms to the rural simplicity of the place. We can find such villages in New England and the Middle States, scattered like bright constellations amid the rough hills and in smiling vallies, but in the West they are seldom seen. Driving up to the hotel, where a huge sign swinging from a tall post told us it was the Prairieville House, and that rest and food "for man and beast" could be found within, I gave the reins to the landlord, and then entered the bar-room. It's only occupant was a young man of about twenty-four years, who sat in an old-fashioned, straight-backed chair, contentedly smoking a cigar. Wishing him "Good evening!" he returned the salutation in an easy manner, and offering a chair, he requested me to take a seat.

"You have a pleasant village here," I remarked. "Oh yes, quite pleasant, sir," he answered; "good, enterprising inhabitants, and a fine country to operate upon."

"People with enterprise and good morals will make a pleasant village anywhere," said I. "Very true, sir, and we have them. There are some poor, wretched creatures here, however, as well as everywhere, and there comes one now."

As he finished speaking I heard some one come in, but as I was getting somewhat interested in our conversation I scarcely looked up, and was about to continue my remarks, when the person who had just entered, said, "Did you speak to me, sir?" The voice was so harsh and unearthly that I turned and surveyed the speaker. He was of middle age, and had, perhaps, been a good-looking man in his younger days, but strong drink had made him a total wreck. His clothes were torn and soiled, his face scarred and dirty, his hair matted and twisted together, while a strange, fiery light shone from his blood-shot eyes. A single glance convinced me that he was laboring under a fit of delirium tremens. After gazing steadily at my companion for a moment, he spoke again: "Did you speak to me, sir? Ha! the great demon that haunts me eternally told me to kill you;" and grasping a large, iron poker, he advanced with the fierce impetuosity of a madman. My companion, who had, perhaps, seen him so often before, did not have his attention directed towards him as I did, consequently he did not notice his movements until he uttered the threat to kill him, and even then he did not attempt to rise from his seat. Having seen and had much to do with such characters, I did not hesitate how to act. A heavy bowie-knife was in the pocket of my coat, and drawing it, I advanced and [illegible] the madman's arm just as he raised the poker to [illegible]; then presenting the glittering blade to his eyes, I [illegible]ned in my sternest voice,—"Stop, or I'll kill you!" He obeyed the harsh mandate intuitively, and as the landlord entered at this moment, we all three seized him, and put a stop to all further trouble by confining him in a strong room.

On returning to the bar-room my companion asked me if I proposed stopping in town? "For a few days, probably," I answered; "perhaps longer. It depends on circumstances, however."

"Your name, if you please," he said, and after answering him, he continued,—"I should be pleased to have you call on me before you leave town. I live three miles in the country; the landlord will direct you. My name is Myrtle—Charles Myrtle. Good evening, sir!" and

mounting his horse that stood ready saddled at the door, he rode rapidly away.

"Fine, young fellow," said the landlord as he disappeared from view, and then he added in that knowing way so peculiar to landlords,—"well off, too, and has a good-looking sister,—only two children; you ought to accept the invitation; nice folks, sir."

"I think I will, sir," said I, taking a seat beneath a large locust, to enjoy the cool of the evening, and the flavor of my cheroot.

The following day dawned clear and beautiful. After an early breakfast, I requested the landlord to put a saddle on my horse and bring him out. In a short time I was mounted, and taking the first street that led out on the prairie, I left the town and gained the open country. It was thickly settled for two or three miles, when the farms became somewhat scattered, dwindling down to a few acres under cultivation, with a rude cabin on one corner, but soon even these were passed, and then the wild, virgin prairie stretched out before us. It was a lovely morning. The atmosphere was pure; the sun shone warm and pleasant, while the meadow-lark, perched on some tall flower stalks, sang her sweetest songs. There are but few scenes on which I have gazed more beautiful than a wild prairie,—"the unshorn garden of the desert," as Bryant beautifully expresses it. Yet there is ever a feeling of desolation connected with the scene. When in the unbroken forest, it seems as though hosts of companions stood on every side,—in the great trees, mute, yet very sociable, as they stretch their long, sinewy arms out over you, and they seem to whisper soft and kind as the gentle breeze rustles through the thick foliage; but here, upon the homeless prairie, gazing away to where the blue horizon stops the vision, without seeing the least sign of civilization, it makes one feel sad and lonely. But I was in a pleasant mood, and the birds seemed to sing only for my ears, while the flowers that bloomed in countless numbers,—the western sunflower, the scarlet plume, and a host of other varieties, blossomed alone for my eyes. I must have gone five miles, perhaps further, ere I thought of returning. Discerning a road that branched off from the one I had been following, which seemed to lead to town in another direction, I determined to take it. After riding an hour or so, I came to where two quarter sections had lately been fenced, and as one was south and east of the section line, while the other was north and west, they cornered together, only leaving room for a road between them. As it so happened, that narrow passage was in a low slough, and the travel passing through had formed a deep mud-hole in the center. I had been riding very slowly, revolving in my mind for some plan to pursue during the winter, and so deeply engrossed was I in my thoughts, that I had failed to notice the nature of the country about me, and the first intimation I had of the existence of the mud-hole was when my horse splashed into it up to his knees.

(*To be continued.*)

Costs for Coach of George III., built in 1762. The coach-maker was paid £1,763 15s.; carver, £2,500; gilder, £933 14s.; painter, £315; laceman, £737 10s. 7d.; chaser, £665 4s. 6d.; harness-maker, £385 15s.; mercer, £202 5s 10½d.; bitt-maker, £99 9s. 6d.; *milliner*, £31 3s. 4d.; saddler, £10 6s. 6d.; woolen draper, £4 2s. 6d.; cover-maker, £3 9s. 6d. Total, £7,662 4s. 3½d.

For the New York Coach-maker's Magazine.

THE DISTANCE-TABLE APPLIED TO THE DRAFTING OF BODIES.

BY F. J. FLOWERS.

Mr. Editor:—In order to still further apply the distance-table given on page 48 to practical purposes, I now place before the reader an example of its uses in drafting bodies. The object designed is the obviating of a difficulty very frequently occurring in the construction of a cut-under carriage. This is the striking of the wheel against the bottom, or arched pannel of the body, after passing the wear-iron, or outside of the rocker. Now, in order to remedy a difficulty, it is necessary, first, to ascertain its cause. The reason we assign in this case, is, that the bottom of the body is not swept in accordance with the circle of the wheel which is applied to the carriage, thereby showing the necessity of a co-operating proportion to every part thereof. Let me, in the first place, illustrate my proposition by a reference to

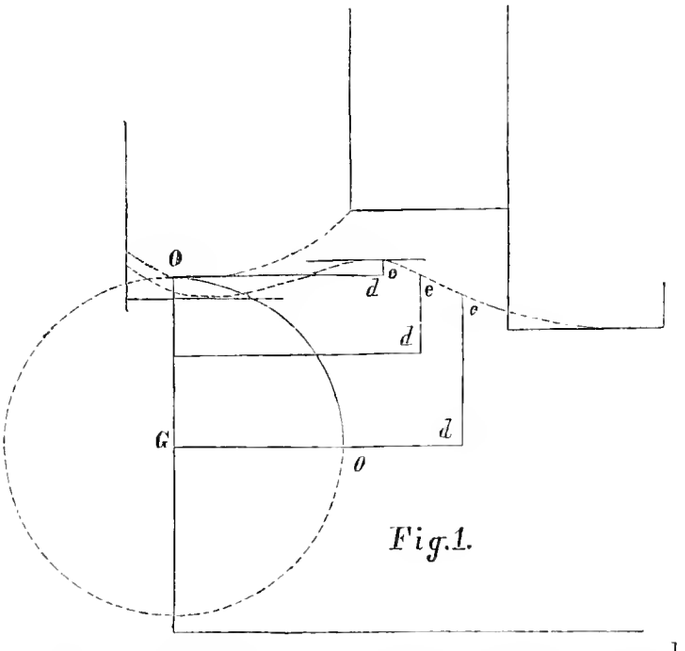


Fig. 1.

After laying down the perpendicular and horizontal lines on the draft-board,—which is generally done to designate the height, length, and width of a body,—and previous to drawing the sweep-lines and the height of the wheels designed for our carriage, we will consult the table on page 48 previously referred to, and learn the position of the center, C, and then strike a quarter-circle from O to O; the same sweep as that of the wheel to be used, being all that is necessary for our present purpose. Next, draw the parallel lines, *d*, *d*, *d*, to the required length as set forth in the table, connecting them with the perpendicular lines, *e*, *e*, *e*, and where they intersect the dotted rocker-sweep is shown the point where the wheel will strike it, after the body is subjected to the action of the spring.

Now, as we are aware that carriages of this class are generally straight across the bottom of the body, and their natural tendency is to pitch forward after using, there must be due allowance made and care taken not to get the sweep too bold between the two lines *e*, *e*, as will be more plainly understood by consulting figure 2,

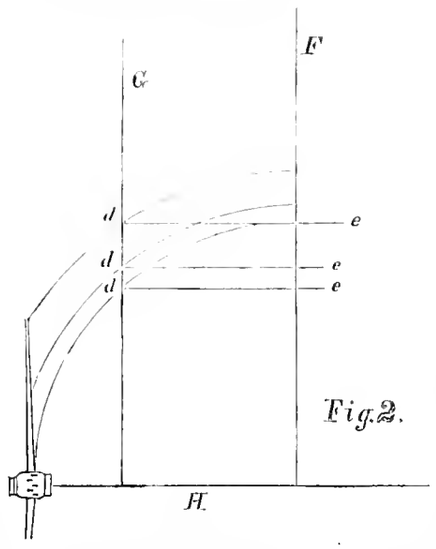


Fig. 2.

which is designed to show the bottom of a carriage. F represents the center, and G the outside of the rocker; H, the axletree; *e*, *e*, *e*, and *d*, *d*, *d* represent the same points as in *Fig.* 1. Now, by observing the line which starts from the center of the wheel, it will be seen that, should the body have too full a sweep at the point referred to, it would be impossible for the wheel to pass more than one-quarter of the distance desirable, under the body, without striking the panel. With these brief explanations I would respectfully submit the drawings to the study of the reader, and they will suggest many points worthy of his attention,—such, for instance, as the sweep of a bed for a platform carriage, and others of like importance.

For the New York Coach-maker's Magazine.

THE ART OF CARVING CARRIAGE-PARTS.

BY H. S. WILLIAMS.

The art of carving is but indifferently understood among that numerous and very respectable portion of the craft denominated "tramping jours." Yet it is of the greatest importance, as the most casual observer must have noticed, and we have often wondered why they have never turned their attention to this branch of the business more than they have. We have known body-makers who were excellent workmen,—making every joint about a job fit with "exact nicety," every panel with just the right swell to give it symmetry of form and beauty of finish,—who knew nothing of the first and most simple rudiments of carving. Ask them the reason why, and they answer,—"We've got no taste for it, consequently we have never bothered our heads with it." The true reason perhaps, is, that most of them have learned their trades in large shops, where a regular carver did all that kind of work. Now we hold that every *good* workman can carve, just as easily as he can lay off a draft, and we will give two reasons why they should do it.

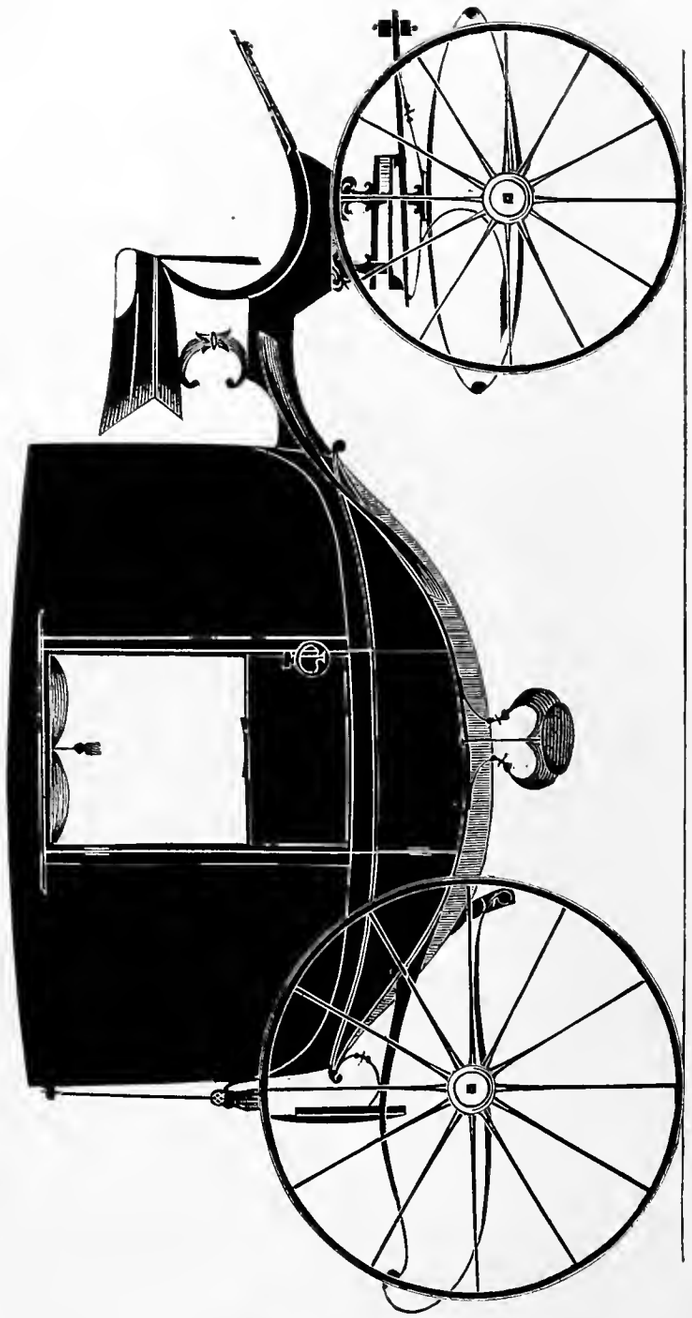
First, its utility. Throughout the South and far West, where good workmen are "few and far between," the art is just coming in practice. In Illinois, Missouri, Mississippi and Alabama, the carriage-part of almost every buggy, making any pretentions towards the *fancy*, is carved, and sometimes very elaborately. A body-maker who can carve, as we have learned by experience, is always preferred, and he can usually command better prices for his work than one who does not understand it. And then the knowledge comes very handy at times, under odd circumstances. We will narrate a case "to the point" in our experience.

While in Council Bluffs, some time since, I stepped inside a wagon-shop, no carriage-shop being in the place. I was in a situation by no means enviable to a gentleman possessing a sensitive nature, and I was looking about with "an eye to business." A well-dressed gentleman was conversing with "the boss" while he held the back axle-bed of a Rockaway in his hand, which was elaborately carved. As I entered, I heard him say, "Well then, if you can't do it I'll have to send it to St. Louis," and he turned to go out. "Do you wish a new axle-bed made?" I asked as he was passing by me. "Yes, sir," he answered, "this one is broken." "What will it cost to send it to St. Louis and have a new one returned?" I asked. "Fifteen or twenty dollars, I suppose," he replied. "Well, sir, I'll do it for ten," said I. He looked at me in surprise, and asked, "Are you a carriage-maker?" "I pass for one among the craft." "Can you make one just like this?" "Certainly! if not, I'll charge you nothing." "Then I'll give you ten dollars," he said, as he left the shop. Getting out a new one, I managed, with the use of some old chisels and my pocket-knife, to make a duplicate of the broken one so correct, that the owner not only paid me the X, but *blowed* my mechanism over the town, so that I drove quite a brisk trade for a time in repairing Rockaways and buggies, thereby replenishing my purse to "plethoric dimensions," as friend Scott would say.

Secondly, its convenience. Many of the new styles of bodies, as can be seen by consulting the drafts in "*our* Magazine," have more or less carving on them by way of ornament. As most of the carriage-shops, especially in the rural districts, have no regular carver connected therewith, it is absolutely necessary for a body-maker to carve, else the ornamental part must be left off altogether. We propose, however, to confine our remarks to carving carriage-parts, where the above reason will operate fully as strong as on bodies. As we write for some who have learned their trade where no carving was done, we will begin at the beginning, which brings us to the tools necessary for the work. First, select a complete set of flat and half-round gouges. Spear & Jackson's are good, but as we are somewhat *Americanish*, we recommend the make of a company in Rochester, N. Y., the name of which we cannot recall just now. Perhaps Mr. Stratton can tell us. They are, in our opinion, better tempered than S. & J's. Having obtained gouges, get two parting tools, a large and small size. Grind the tools with a long bevel, so as to cut deep without chipping off the surface of the wood, and get a true, keen edge on them. The mallet is not of much consequence, but believing every good workman is a man of some taste, we will say that a small, heavy one is best adapted for the purpose. We have one made of Turkish boxwood, with a cedar handle cut on the bluff of the upper Missouri.

Of the style we will speak next month, when we propose presenting some designs applicable for the different parts of the work.

[The name of the house our correspondent wishes us to make known is D. R. Barton, 3 Buffalo Street, Rochester, N. Y. The designs alluded to in the closing paragraph, were given last month, on plate 15, with suitable explanations on page 68. This is a subject of much importance to our journeymen readers and others, and we hope our able correspondent will pursue the subject still further for the benefit of his fellow craftsmen. Ed.]

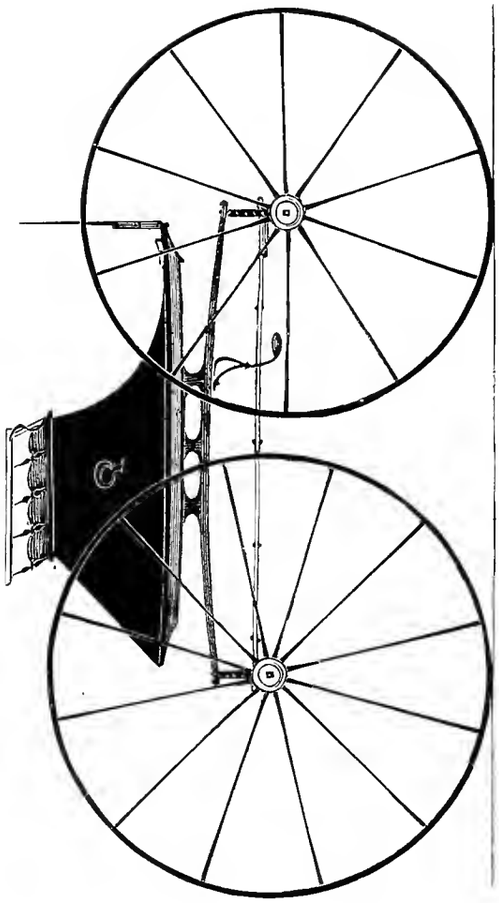


CAMPAIGN CLOSE-COACH.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 89.

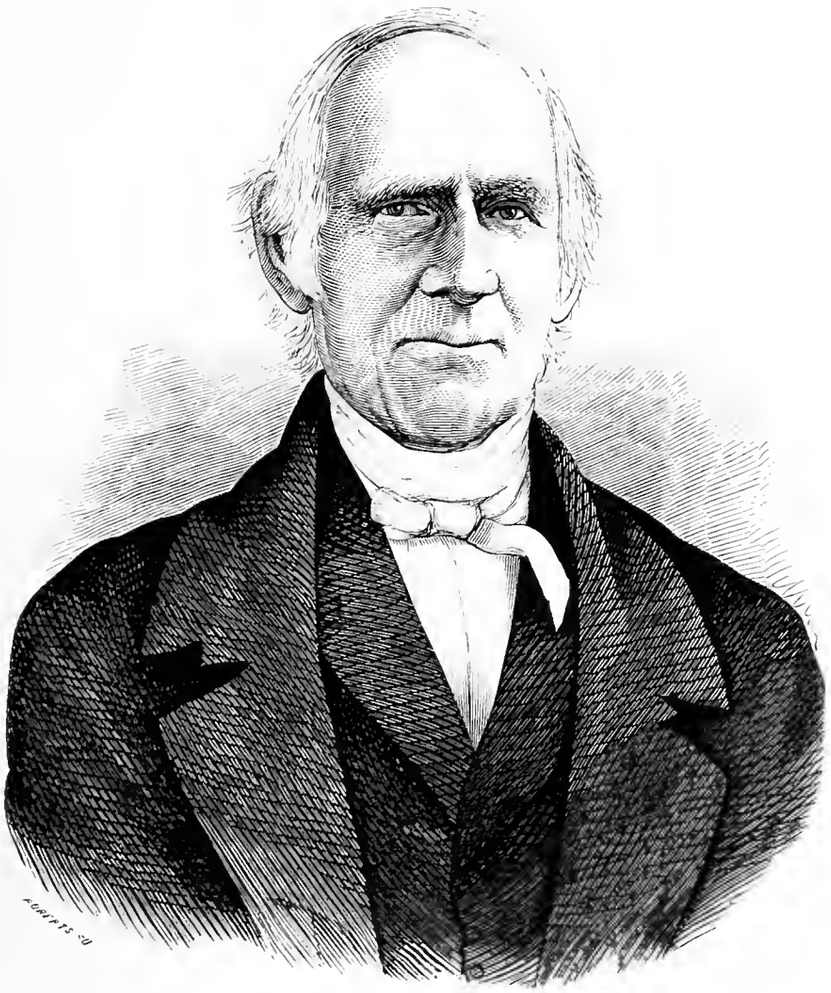
FANCY LIGHT ROCKAWAY.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—*Explained on page 89.*



YACHT BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 89.



Yours Truly

Robt. B. Campbell

Engraved expressly for the New York Coach-maker's Magazine.

October, 1860.

Pen Illustrations of the Drafts.

CAMPAIGN CLOSE COACH.

Illustrated on Plate XVI.

DISTINGUISHED as the present year must necessarily be in our history as one of political warfare, in compliment to the event we have named the original design here presented, the Campaign Close Coach. In doing so we have no partisan objects to promote, and trust that we have thereby shown ourself "neutral." All parties are fond of riding in a coach, of which any public procession furnishes proof. Our "city fathers," although antipodes in political faith, are wonderfully fraternal on such occasions, and, indeed, on all occasions when the all-powerful "cohesion of public plunder" brings them together. But we have no intention here of penning a political diatribe.

This design we claim as original with this Magazine, and believe that it alone is worth more than the three dollars a year we charge to our subscribers. We might go into an elaborate mention of whatin these original features consist, but to those interested they will readily appear, on inspecting the drawing. The wing-duster is the revival of an old fashion in coaches in this country, but is none the less elegant on that account. The "quarters" have a light form, which is a desirable point gained. This description of stay to the dickey-seat will be found fully described on page 210 of our second volume. It is peculiarly American, and very tasteful. The combination of the pump-handle with the scroll-spring is another feature deserving of mention. But where so many new points culminate, we may well be spared the task of pointing them out.

FANCIFUL LIGHT ROCKAWAY.

Illustrated on Plate XVII.

THIS is another original design, drawn expressly for our Magazine. It has fanciful door-lights of a novel form and very tasteful. The front and back quarters are fitted with panels of imitation French basket-work, manufactured in New York city, and superior to any imported. This article is supplied by us to our country friends at 75 cents per superficial foot.

YACHT BUGGY.

Illustrated on Plate XVIII.

WE give this drawing as being the very latest fashion of a New York buggy. The novelty about it consists in the peculiar and boat-like formation of the ends and sides of the body, hence the name, Yacht Buggy. The body should be constructed with the bottom-side (represented in our engraving by the narrow black line) projecting outward a little from the rocker represented by the lighter shade engraving, and which is worked to form a large concave beading its entire length and width on the side.

The seat is another modification of the stick seat lately so fashionable. Our drawing will convey a correct idea of that we wish to present. The pillars and rails are all "dressed out" of a square form, with the corners merely taken off with a scratch or two of the file, and a concave moulding worked entirely around in the center of the rails and pillars. The boot is panel, and when we say that, our readers will understand that in order to have these kind of buggies look well, they must be *well* painted.

APROPOS TO OUR DESIGNS.

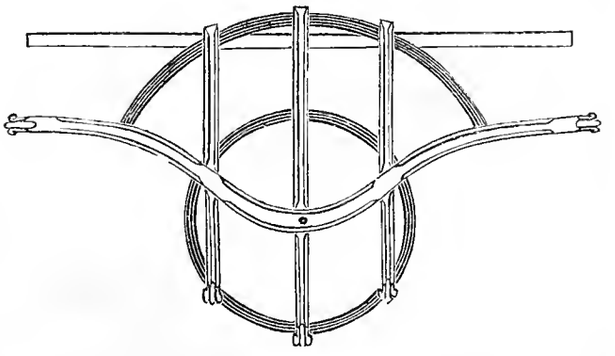
FROM the tone of letters received at this office from some correspondents, we gather that because our Monthly is regularly copyrighted, they think this deprives them from building after our designs. Nothing can be further from our intentions. Our copyright is secured merely to stop the base practices of certain parties who, when they take occasion to prepare a book, or engravings, either for their own or customers' business, transfer or copy our engravings without permission. In this connection, all honest men are informed that, when requested, we furnish electrotypes of our cuts at a cheaper rate than can be done in any other way, so that here "honesty is the best policy." It is the *pirate* around whose neck we are determined hereafter to draw the *tightest* cord of the law. Our designs cost us much expense, and we think we are fully entitled to the profits legitimately accruing therefrom. *Verbum sap.*, &c.

Sparks from the Anvil.

FORE-CARRIAGE FOR A SOCIABLE.

FIGURE 1 represents the upper portion of the double fifth-wheel of a sectional carriage-part. The advantages

FIG. 1.

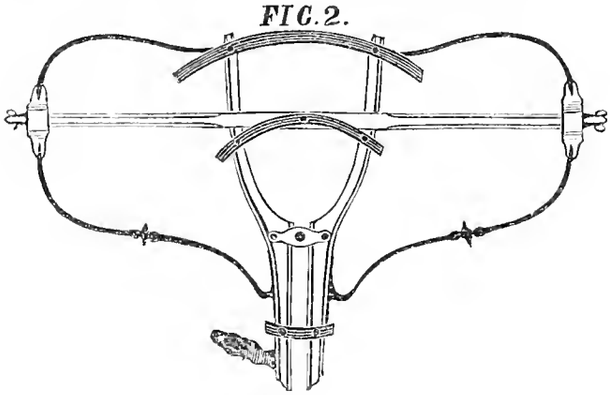


derived from this mode of construction are found in the favorable position it presents for placing the king-bolt so as to admit of a short turning, while at the same time it offers a sufficient bearing to give efficiency to the fore-carriage, by allowing the fifth-wheel to extend over the jaws of the futchells that receive the pole, rendering the part more solid. This portion of the carriage receives

additional strength by the use of three horn-bars (by some denominated puncheons) as in our figure.

Fig. 2 is a birds-eye view of the lower section of the same fore-carriage constructed in the usual manner. The iron brace for securing the pole in its position is dis-

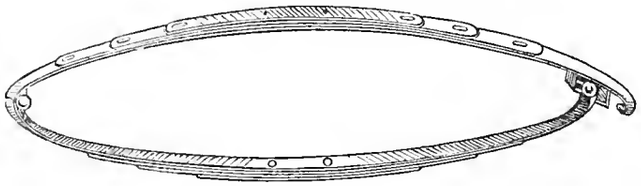
FIG. 2.



pensed with in our example, a segment of the fifth-wheel, in front, furnishing a substitute. The fore-carriages of some no-perch vehicles afford a subject for the exercise of ornamental taste in the workman in iron, which no other portion presents, and this is one of them.

ELLIPTICAL SPRING, WITH IMPROVED SLIDING EAR.

The example here illustrated is another improvement in the elliptical spring. As here arranged, a fine play is imparted to the motion around the bolt in the French ear-head, adding to that of turning the agreeable motion



of sliding. To accomplish this end, a small chamber is welded to the under side of the long leaf in the upper half of the spring, in which the lower half with a French head at the end inserted, secured by a bolt, plays. This being a decided novelty, it gives us great pleasure to publish it for the benefit of our patrons.

THE BATTLE OF THE AXLETREES.

[*Continued from page* 70.]

John Mears, of Dorchester, follows in a pleasing strain, claiming that iron axles are superior to wooden ones. Hear him:

"Now in the days of Sanford, whose surname was Howard—Otis being chief Brewer in the Cultivator region round about, where horse cars were being introduced—there arose no small stir about wheel vehicles, and the axles on which they run, many doubting whether the last should be wood or iron. The larger part, however, went for iron, while the lesser were favorably disposed toward the wooden axle, by reason of a *seeming evidence* that the wood were the easier of the twain.

"Then there arose one Weaver, whose beam was an axle-tree, albeit he was of the order of the Berean, 'who searched whether these things were so,' that if the gods of the forest were greater, to follow them; but, if those of the puddling furnace and the forge, beaten and shapen by man's devices, to follow them; proving all things, and following that which is good.

"Now in process of time there arose one David, whose surname was Stiles. He was not that David who in his youthful days threw stones at Goliah, for the earth had revolved on its axis many times since he had been gathered to his fathers—but our David was a disciple of Vulcan, and had a light chariot with wooden axles, which were exceeding nice, the hubs thereof being tipped with polished metal, the centre of the arm being bored out and an iron rod inserted therein, and made fast thereto with head, plate, pin, and nut, so that no carriage-maker on earth could discern its dissimilarity to iron—when looking another way. Now David had great faith in wooden axles, so much, that with sufficient work with the shovel in putting a portion of gravel on many such wagons, in due time a mountain might be moved..

"Now when all men marveled whereunto this matter should come, there stood forth from the land of the Pilgrims a man by the name of John—a man who had turned the earth upside down—his name being on many ploughs in all the region round about, from Dan to Beersheba, i. e., wherever a live Yankee had stopped six weeks—and he said, I too will show my opinion; so taking his pen he wrote, that one Faxon carried 1,500 lbs. on four iron axles of one inch diameter, and Alger took a cord of green wood on 1¾-inch axles; Bryant suspended 18 tons of granite under four-inch axles, and—also many more than 30 tons under four-inch wrought, and ten-inch hollow cast-iron axles. West mounted 30, 50, and 68 tons of granite on a car compounded of three wagons having four-inch iron axles each. All these were drawn to their destination with ease and safety.

"Again, in the days of the Revolution, that Great Mortar, called 'The Old Sow,' was transported across the country on *wooden axles*, which took fire by friction so often, though well watered, that they had to be renewed on the route. Also, a drag-sled of timber was made to haul a granite block of 30 tons upon the snow, with less than a mile of hard hauling; but it left it in the gutter, whence it was taken by wagons.

"Hear now the conclusion of the whole matter after fifty years experience and observation:—An old, worn-out, unbroken iron axle is worth more than a wooden one ever was!

"Thus endeth the first chapter on axles by John, whose surname is Mears."

[Though the following letter, which accompanied the above, was addressed to us in our individual capacity, it may be too useful to practical men—of which order our correspondent has been for many years an active member—not to be "born again," and see the light of day in types as well as in our correspondent's *distinct* chirography.—Eds. *Cultivator.*]

"Friends,—This epistle is to you, in which I would say, that in my opinion the best axle-tree, for heavy draft, is a bar of iron of good quality, well wrought under the hammer, with solid shoulder collars, having N. Day's 'lubricating box.' Arm nearly cylindrical, rather long, turned or swaged to meet the box and nut, each having a coun-

tersunk approach to their shoulders, hexagonal nuts, with flanch extending over the box end, the under side of the arms dropping slightly from the level of the bed and having only a perceptible gather, or inclination forward, with about an eighth of an inch play, to be made fast to a plank stock by bands and yokes—without a hole for the bolt, the transom bolt being in front, a proper length being had between the shoulders, that the wheels will follow the ruts when they are to be used. On these arms let there be cast-iron double-flanch hubs, cast on Alger's polished drifting pin-cores, with oiling-tubes and screw on the back flanch, and wrought-iron sand hoops on the ends. These, if well wooded and tired, and properly set, as they may be if the rule be followed, will make a wagon that will do for you and I to drive, running easy under a heavy load, and giving us music up to the hub as it travels over the rough road of Jordan to Canaan's happy land—where I shall be happy to meet you and other friends."

Mr. Tarbell, of Marlboro, N. H., is down on wooden axles, and so meets Mr. Stiles with the following logical epistle:

"As this subject is brought up for discussion, I should like to say a few words upon it, also to reply to the communication which appeared in your issue of June 16th, from the pen of David Stiles, Jr. I think some of his statements cannot be supported by facts. He says that an iron axle adds from one third to one half to the weight of any wagon or carriage. I think that any one can see at a glance that there need not be such a difference in two wagons of equal strength and durability. The body and wheels will not necessarily be heavier; and the difference in the weight of the axles and the necessary ironing will be but small compared with the reduced friction on the iron axle. And that there is less friction, I think can be proved on scientific principles.

"The smaller the axle, the less the friction. Now for the proof of the assertion: First, the smaller the axle, the nearer the friction comes to the centre or a point, and the longer the leverage of the spoke. Second, the smaller the axle, the slower will be the velocity of the surface of the box on the same, because the circle is smaller. Third, there is not as much surface to have friction upon. Some may have the opposite idea, that it is better to have more surface for the axle to bear upon, but I cannot see how this can ever rest on scientific principles; it is evident that the friction must increase with the size of the axle. I have worked with machinery for many years, and have found that large bearings take more power than small ones, even with balance wheel on the latter; the difference is easy to be seen when running under high speed.

"Again, the correspondent referred to states that he has made a wagon nearly all of wood, a little more than half as heavy as a common York buggy; he does not say where all the difference is,—how much or how little was owing to its wooden axles. Time will probably tell the strength and durability of his light wagon. There is another point that your correspondent seems to lose sight of; that is, as he increases the load, he does not augment the weight of the wagon. When a wagon is loaded, the difference in the *weight* of the axles sinks into insignificance, while the difference in *friction* increases as the load is increased. Teamsters have long since found out the difference between drawing loads on iron and wooden axles, (even over our hills,) and I have never heard one speak in favor of the latter. They will as soon return to the old wooden plough again as to the wooden axle.

"I think the superiority of the iron over the wooden axle-trees has long ago been demonstrated, both practically and theoretically."

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page 73.*)

The wood workman can inspect his lumber and judge whether it be seasoned, and proper for his job; and the blacksmith can form some little idea of the quality of his iron; and so with the trimmer, he knows the quality of his stock at a glance; but the painter has to take whatever comes along, and trust to the skill of the manufacturer for his own reputation. Should the stock turn out bad, it can only be detected after months have elapsed, and when it is too late to apply the remedy. You say if one coat of paint be defective, another may be given; if unfortunate with one coat of varnish, you can apply another. All true to a certain extent, but every unnecessary coat of paint and varnish given the vehicle is so much towards making a job the worse for it. The varnish always remains hazardous, and can never be rectified without causing a great delay. Previous to laying the last coat, the skillful and prudent workman prepares his room, choosing a day which looks propitious, having a serene sky, with a clear, dry atmosphere, and scarcely any perceptible wind. He sees that the windows are secured and the sashes well dusted, and that the floor is swept and sprinkled, and the body is all washed with the greatest exactness and nicety. He likewise attends to having the corners tooled out, and every portion well chamoised, and that his varnish brushes are cleanly washed, and not forgetting the dust brush—has every preparation made to insure a good job. The varnish-room doors being closed, you now finally commence, and though the first panel does not entirely come up to your expectations, you are still hopeful that the most prominent parts will turn out all right. Vain expectation! mortal disappointment! by some unforseen circumstance the brushes must have touched something dirty, or it may be a particle of dust has been overlooked in a crevice or corner; and every little substance, though not preceptible to the naked eye, when upon a varnished surface looms up into a miniature mountain, and continues an eye-sore to the painter as long as he sees it.

The case may be otherwise, and you have been successful in laying a satisfactory coat of varnish, and you then leave it for the night in an ecstasy of delight; but, upon inspecting it in the morning, you are doomed to disappointment. A gale of wind sprung up during the night, and, your windows not being of the tightest kind, has well sanded your job, in addition to which a dozen or more flies have left their tracks and carcases, many of them in the most prominent places. Under all these circumstances you deem it admissible to rub the job down again and give it another coat. The last coat being best English body-varnish, it does not dry well and should not be rubbed under five or six weeks; but you let it stand one week and begin to rub it. As you rub off the dry

surface it begins to feel sticky, but as it must be done you are obliged to varnish it over once more. This time you escape the flies and dirt, but your varnish has "pitted," and looks worse than ever. You may let it stand and try another coat, but there are a dozen more mishaps, any one of which may befall you. All these little trials, troubles, and vexations, which all painters are liable to, are but seldom taken into consideration by employers; and no inconvenience a painter can be put to seems enough, if work is ordered to be completed by a special time. The time the painter requires to do his part in is but seldom thought of. Should it require one month, one week is thought all-sufficient. The woodman and blacksmith can loaf and lounge over a job, but when it comes to the painter, he must do it by a certain time required; and when his work fails to give the requisite satisfaction, the painter gets more blame than what rightly belongs to him, and which is ill deserved. If employers will but take these things into consideration, and allow for the disadvantages under which painters labor, they will not only give to them the credit due, but leave a wide margin for all the embarrassments thrown in their way by the incompetence of the other branches, and make due allowance for all the little troubles and crosses, vexations and complications, incidental to their trade.

One word to my brother Jours—when you are at work, attend to your business, exert yourself to the uttermost to benefit your employer, for the man that does not make his employer's interest his own is not worthy of his hire. Do all that lies in your power to make your work give satisfaction to yourself, your employer, and the purchaser; but when you leave your place of business, wipe your shoes of paint and painting, and never take the cares of the workshop to your own domestic hearthstone. Should you be young and an enthusiast in your business, don't tumble up and down your bed all night (as I have done many a time), thinking whether that varnish will run, or that color dry; that will never improve it. But do your whole duty while you are at work, and never be satisfied until you are sure you have given a fair day's work for a fair day's pay; no employer can expect more; no employe should be content with doing less.

The reader will probably begin to think that these papers were not inappropriately headed "Gossip," and that I am going the whole length of the definition the lexicographer gives of the word; for, according to its construction, we are led to believe that what we write is nothing more than "idle tattling," or "trifling talk." We plead guilty to one and both of these charges, and can only ask the indulgence of the reader, by assuring him that with this and two more chapters we intend to conclude all that we have to say under this heading.

The reader may probably labor under the impression that we have forgotten the coach-body that we placed in the hands of the trimmer in the earlier part of these papers. But not so. We have occasionally stepped into the trimmer's room, and have taken a look around to see how it was getting along; and we shall now suppose that it is finished trimming, and is in our own hands again, ready to be rubbed down for the last coat of varnish. There is one great fault all trimmers appear to have, which I will here mention. It is in nailing the lace round doors and windows too far over the edge of the wood, by which means the painter cannot rub the edges of doors without filling the lace with pumice dust, nor wash them without wetting the lace, nor varnish without dirtying his brushes with the little bits of stray worsted which will hang around. This is not all. Every time the owner has it washed he gets the lace wet, which soon fades and wears out before other parts of the lining are soiled. The trimmer, by nailing so close, frequently chips out pieces of wood, which never adds any beauty to its appearance. I think the edges should be all blacked and varnished for one half-inch upon the insides, and the lace to come but just flush to the edge of the wood. This would be fully appreciated by painters, and could not damage the appearance of a vehicle to any very great extent. We will not dwell upon the dents, hammer marks, and unnecessary bruises our job has got while in the hands of the trimmers, but proceed with our own work of rubbing it.

It will not be expected that any extended remarks should be made upon this portion of our branch of the trade. The difference between a half-rubbed body and one thoroughly rubbed can only be fully known and appreciated by the competent and experienced workman. Unless a body is well rubbed and a perfect surface obtained, a good job can never be expected; and it requires an expert to know how to rub a piece of work to perfection, and a still greater expert to know when it is rubbed what we will call unexceptionable. This difference between the time consumed in the rubbing of a piece of work often constitutes the variableness of time occupied by different men upon similar pieces of work, and the indifferent employer often gets deceived in the qualifications of his men between those who do their work properly, and those who slight it. The body we have in hand having had only three coats of varnish, one man could rub it all over in one day, and another could work hard upon it six days, and then do it no harm. I have known men work hard a whole day upon a single quarter-panel, that has had four coats of tough English varnish, and then not finish it. The time occupied in rubbing a piece of work will vary according to the quality of the varnish put upon it, and equally as much upon the quality of the rubbing. Some men will use but little stone, and not enough force to kill a flea. Such men might rub a month upon our body, and then not have it to our satisfaction.

There is a certain way to rub a varnished surface which cannot very well be described, and which none but the experienced could comprehend. However, we shall endeavor to rub this job right, and without stinting ourselves to any particular time, we may add, that, if we can rub it in thirty hours, we shall be well satisfied. Remember, we could go over it in ten hours, or even in six, but we design that our work shall be no apology for that which we undertake to perform. I have heard it disputed whether it is best to use a block for a large, flat surface; I can see no objection to this practice. I prefer a nice, light, cork block, with three or four thicknesses of broadcloth beneath it, to using the cloth by itself. You have more power, and can put more "elbow grease" into your labor, which is one great secret of good and perfect rubbing. Rubbing is hard work at best, and should you make easy work of it, you cannot do it expeditiously or properly. We shall suppose then that we are to give our roof a thorough good rubbing, and then the back; now the front, and then each side in their turns, and lastly the sunken bottom.

It must be remembered that our mouldings have never been blacked, so we are not afraid to take off the edges,

but give them a good scouring, during which we must be mindful of the trimming in the inside, and especially so in rubbing the insides of the doors, where we must be careful of not getting too much dust upon the lace, which once on, is hard to get off. Pumice-stone stains upon some linings will never come out.

We shall now presume that our job is rubbed to perfection, just enough, but none too much. To rub down to the color and afterwards have to retouch it again will ruin the best of work, and should be carefully avoided. We have washed off our work as we have rubbed it, but we now will give it a final wash previous to blacking the mouldings, taking care to note such places as are stained, and pass the cloth over them again. Now, all being clean and dry, we shall proceed to black the mouldings and such other places as are necessary. The reader will bear in mind that the black work is black japan, and the mouldings should be the same, so we grind a little drop-black expressly for this job; not having enough oil in it to make it shine, but enough sugar-of-lead in it to insure its drying, remembering that should it dry too quick your mouldings will be sure to crack. We grind this as fine as "butter," and lay on a very thin coat, and the next day being all dry, we lay on a thin coat of black japan. The "pump-handles," or "horns," not having been striped, we will put them through the same process as the mouldings. It may not always be convenient to occupy two days in blacking mouldings. When this happens, one part each of black japan, and quick-drying best drop-black, finely ground, might be substituted for the two coats; but this will not always cover well, and the former mode is preferable. If the job is to be fine lined, now is the time to do it. If any coat-of-arms, or other ornament is wanted, it should have been put on between the second and third coats of varnish, so as to have had two coats of varnish over it.

(*To be continued.*)

Trimming Room.

For the New York Coach-maker's Magazine.

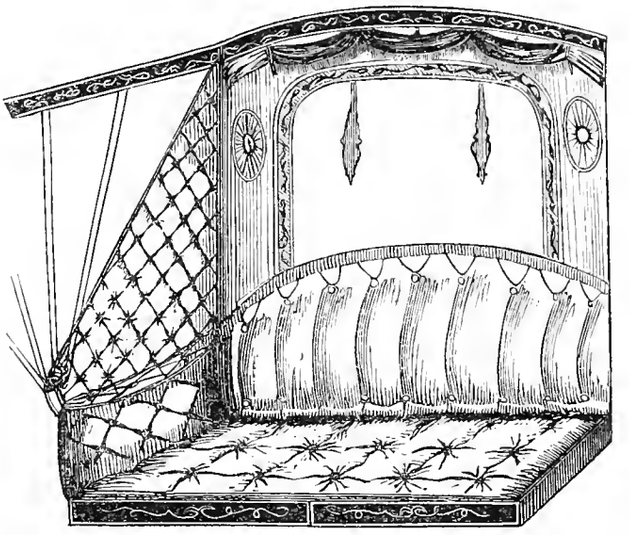
LININGS MADE UPON A FRAME.

There are different modes of making the back linings of carriages, but none so conveniently formed as upon a frame. By this operation considerable may be saved in the expense, as one thickness of buckram and another thickness of muslin will suffice for most descriptions of cheap work. To do this, a frame suited to the job must be formed, but where several similar linings are to be made its advantages will soon become manifest in the more easy formation of the work, and its less liability to curl up at the edges under the process. A back made in this way is soon ready for use, for, while the drying is going on, the tufting and stuffing can also be done, whereas in a job made heavy by several thicknesses of buckram this process is slow and tedious, sometimes causing vexatious delay in completing a carriage, especially should the carriage be for a hurried order.

The frame, where the linings are small, would not be quite so useful, but in the larger-sized backs can be used to good advantage. Please try our recommendation, and "report progress" for the benefit of the craft. R. T.

DESIGN FOR TRIMMING A PHAETON.

In trimming carriages, as in many other branches of mechanical business, the skill of the operator makes a vast difference in the appearance of the job when completed. Such will be the case with a job of the kind here engraved,

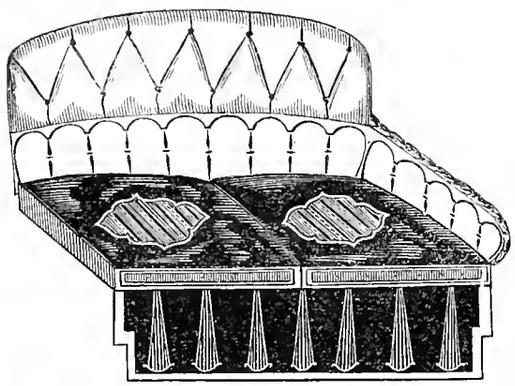


and since our design requires considerable skill to render it effective, we advise that no mere tyro be allowed to undertake it. When finished by a good mechanic, the design will be found a good one, although a little complicated.

No explanation is needed for making the cushion or forming the back lining in this place, further than to refer the reader to our remarks on page 73. It is understood that in this instance we have in hand a gipsey top, and that, in the corner-angles formed by the net-work in the side, buttons are represented. The lining is stuffed (between the buttons) with cotton or hair. The ovals at the back are made of silk, folded as shown, and drawn together in the center, and fastened beneath a large fancy button or rosette. When drab cloth and drab silk are used in combination in a job of this kind, and skillfully executed, it looks very neat and tasty.

CARRIAGE-SEAT WITH HIGH BACK.

For our present purpose we shall suppose the cushions of our seat are to be made from some dark blue morocco, and edged or bound with black enameled leather, having fancy center-pieces edged with the same material; the leather in the figure, as well as that in the cushion fronts, being laid in plaits, or plaid. The fall being plainly formed from collar leather, and the imitation folds laid on in their proper places, are afterwards securely nailed to a slat at the back of the fall at its lower edge, and then stitched at the top, so as to fasten them properly in place. This combination of novelty with earlier design, produces a pleasing effect upon the



eye. The seat itself, as may be seen from our illustration, is the common one, adaptable to many light carriages, particularly buggies.

The New York Coach-Maker's Magazine.

OCTOBER 1, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

Volumes I. and II. *of this work, bound in muslin, gilt, the two vols. for* $6.00, *or single for* $3.50, *can still be had at this Office, or through the booksellers. Also sold in numbers (single or sets) for* 25 *cents each.*

☞ *All letters directed to this office on business* not *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* not *complied with, no attention will be given them.*

☞ *Name-plates furnished to order, of different patterns, for from* $14 *to* $20 *per hundred, at this office, or sent according to directions, by express, payable on delivery; to which express charge must be added.*

"J. S., of Conn."—We know nothing more about the vegetable leather than you have learned from the Magazine for December, 1859. We doubt if it could be purchased in this country. It is a European "notion."

"J. H., of Miss."—We prefer to have subscriptions commence with June number, annually. We can supply complete sets.

"J. T. S., of Pa."—You ask a favor which our office rules forbids our complying with. We do not want any agent in your direction. Our special agent will visit the place.

"C. C. K., of Pa."—We do not want your agency.

ENGLISH AND AMERICAN TASTE IN CARRIAGE BUILDING.

We find an article under this comprehensive caption, in a recent number of our transatlantic contemporary, "The Carriage Builders' Art Journal," of London, which seems to have been intended as an answer to an article in our issue of March, 1860, entitled "An English Criticism of American Carriages," which was a candid and good-humored notice of a previous article on those subjects in the aforesaid "Journal," in its issue of last December.

With an abiding faith in the emulative interchange of transatlantic opinions either way, as being most likely to produce a polite and cosmopolitan attrition of inventive ideas in favor of a spreading civilization, we certainly confess to having been somewhat astonished at the first reading of "English and American Taste in Carriage Building." Afterwards we became convinced (in spite of our respectful regard for all contemporaries), of the paltry unfairness of its writer's mode of argument, especially on observing the jesuitical manner in which he has begged the whole question by not replying to our statement that the owners of English or European carriages usually contrive to part with such vehicles "at a marvelously low figure," as soon as possible after landing here and forming (for themselves) some practical acquaintance with the much more adaptable merits of American carriages. However, perhaps this careful avoidance of such an incontrovertible matter of fact is only another clumsy illustration of what the "Journal" gentleman calls "*quiet* good taste."

Really the article, "English and American Taste in Carriage Building," is so unfairly written, that, with all our usual proclivities in favor of free opinions, we can only condescend to notice such a misguided production under a preliminary protest, while proceeding to perform our duty as a defender of the interests of American carriage-makers, and an advocate of "fair play" in general.

Some such protest certainly seems needed; for, although we are always quite willing to fraternize with our London contemporary, or any editorial brethren, in an honest "endeavor to discover in concert the conditions of beauty and order," we do not feel obliged to hold converse with every ill-conditioned or ill-mannered controversialist who may choose to persist in mis-quoting our language or mis-stating our arguments, and distorting the paragraphs thus strung out with false quotations generally. We say this not from any ill-will, as there is no occasion for us to forget the dignity of our position for a single moment; but, we are obliged to speak thus from the nature of the circumstances, because there never can be any "mutual profit and satisfaction" in attempting either to agree or argue with such a lop-sided and slippery opponent, especially as we cannot help thinking that our British coach-making cousins (speaking of them in their national aggregate) deserve to have a much better and more worthy champion.

This egregious genius says, in the article alluded to, that, "without desiring to reflect on the understanding of our friend," *he* can show "that others entertain the same opinions as ourselves," i. e., the London publication. He then proceeds to bolster himself up with a couple of quotations, as gravely as if they were buttresses for some part of Westminster Abbey.

Now, "without desiring to reflect on the" *veracity* "of our" London "friend," let us examine those quotations.

One is said to be from our own "able contributor" of "Gossip for the Paint Shop." Our London friend represents him as having said that he "knows of nothing equal to an English nobleman's carriage." As our "Gossip for the Paint Shop" is written by a very well-informed and impartial gentleman, who has had opportunities for comparative observation during the last six or seven years in America, we have tried to find where the assertion (attributed to him by our London opponent) exists. The nearest approach we have yet discovered is on page 190, Vol. II., where, while speaking of the paint usually known as "English patent yellow," being a useful color for English carriages, although "an unsightly color in this country," our "Gossip" friend then proceeds to say, with his usually tasteful discrimination, "There is nothing in my mind equals an English nobleman's chariot, or it may be a foreign ambassador's court-carriage, painted patent yellow."

Any intelligent reader, without being a carriage-maker, may perceive that this is a horse of "another color" entirely; and hence we may also perceive a fair specimen of the unfair quotations allowed to be printed and authorized by our London contemporary upon American matters. Some charitable observers might suggest a "superficial" or "colorable" mistake; but, singularly enough, the peculiarly wholesale twist (from a paint to a building) given to the quotation makes it appear as if our "able contributor" of "Gossip for the Paint Shop" had really affirmed that he "knows of nothing equal to an English nobleman's carriage." Surely, nothing but the most yellow and vulgar jealousy could have prompted such a monstrous mis-quotation. We frankly own up to having heard of Western steamboats said (metaphorically) to have been built of bed-bugs and white lead; but, really, this is the first time we ever heard of carriages (especially with English proportions) being built of yellow paint! We make all the charitable suggestions we can think of for our London friend, so as to "give the culprit the benefit of a doubt," but there seems good and sufficient reasons to fear that he stands before the world *convicted* of willful mis-quotation.

The other attempt at a confirmatory bolster of quotation, which graces the other side of our English critic, is said to have been taken from "a treatise published by Beckman of Hamburg," which is said to say that "A first-class English carriage is without dispute the best-made vehicle in the world." Now, we always have a Yankee way of liking to share in any glory for Old England, and must confess that we have not yet had leisure to make a reference to the pages of this "competent authority," but shall certainly try to procure the book (if in existence) as soon as conveniently possible. In the meantime, we shall also try, in all due courtesy, to suppose that the quotation has been fairly made; and yet, this last effort is a much more difficult job for us than the mere building of a first-class carriage, for the good and sufficient reason that our London opponent has unfortunately put himself in that category of remarkably unfortunate persons, whose unsupported word cannot well be accepted, even when they might happen to speak the truth!

Without the slightest desire to become personal or abusive in our remarks (as we do not think that our duty or our circumstances require us to descend so low as our London opponent in the way of controversy), truth compels us to say that we should prefer waiting for some degree of corroboration found in the work said to be quoted from; as, after the specimen of mis-quotation just given by the London quoter from our own publication, which we *do know*, we may fairly consider that a very large quota of collateral confirmation is required for such a quoter's unsupported statement, made from some other publication which we (as yet) *do not know*. In argument, as in algebra, we mean no disrespect when we endeavor to find out the indeterminate by the determinate.

In all sincerity, we wish to maintain the most cordial relations with our cousins across the water; but bungling diplomatists are very likely to touch the ground when they undertake to negotiate between two stools. As the wonderful advance of carriage-making in this country enables us to be magnanimous, suppose we give the London "culprit the benefit of a doubt" once more, and accept without question his quotation from the "treatise published by Beckman, of Hamburg," that "A first-class English carriage is without dispute the best-made vehicle in the world." For the sake of our London friend's virtue, let us hope that he did not have to translate this from any of the continental languages, for he certainly was astonishingly unfortunate in his other quotation from our "Gossip's" plain English. However, we agree to receive the quotation all the way from Hamburg. What does the sentence, "published by Beckman," prove? Simply that writers on the European continent are frequently too apt to obtain their (honestly conceived, perhaps!) ideas of the world at large in a distorted or discolored view, by being seen through English spectacles, or some other interested medium of national sentiment.

For this very reason, we are elevating our London opponent into more editorial notice than we otherwise should, for our styles of carriage-making in this country need no defence from us among persons qualified to judge in such matters. For this very reason we condescended to notice our opponent's condemnatory twaddle of last December by a reply in our March issue, wherein we in-

cidentally observed, "If such be the English view taken of the present state of carriage-making, we claim the right of being heard before such a sweeping condemnation can be allowed to impose upon the people of any other country." Our word "impose" seems to have had an almost prophetic power of application, leaving Hamburg out of the question, as we know not the date of the "treatise published by Beckmann."

In this country we have a large number of Beekemanns, Beekmanns, Beckmans, Beekmans, etc., who are usually (ladies or gentlemen) good judges of a nice carriage. Pending our inquiries as to the Hamburg "treatise," our London friend might as well send over an English "first-class carriage," consigned to our care, and we will do our best to give it a good show to the Beekman families, side by side with an American-built carriage of similar classification. What say you, Friend "Journal?" Let the verdict of the Beekman descendants in America decide the question as to which deserves the title of "first-class," and we have no fears as to the result, for the New York Coach-maker's Magazine hereby agrees to abide by the decision of the modern Beekmans.

One fact or circumstance like this would be better than reams of controversy. We sincerely wish to treat the question of superiority in carriage building simply on its merits, without wranglings or equivocations. Let us talk reasonably, like practical men who know how a carriage is built, what it is built for, and when or where it is the most available or marketable. Technical quibbling, false quotations, garbled statements of imaginary assertions with very imaginary contradictions, and absurd foundations of supposed arguments upon some paltry typographical errors (so self-evident as to explain themselves), all show to calm observers a bad cause and a worse advocate.

Our "learned brother on the other side" seems to have derived great relief in his argumentative tribulation, as soon as he made an accidental discovery of a typographical error—1857 instead of 1837—which happened in setting the type for our article of last March, while making reference to the octavo volume published by Mr. Adams in 1837, on "Pleasure Carriages." As nearly all our reasoning had some reference also to the years intervening since 1837, the mistake or oversight of the printer was of no practical importance.

Nevertheless, our clerically and typographically exact London critic, in his attempted refutation of our arguments, clearly shows that the error had no bad effect upon him; and, in fact, a large proportion of the neighboring context agrees in showing that we were right in our reasoning, because the error was of that kind which shows, as such, to all who are acquainted with the subject, and therefore misled nobody.

Our desperate and evidently drowning friend, over there in London, seems to weave quite a strong rope while clutching at this straw of a typographical error. Much good may the rope do him! There is a doubt, sometimes, between a rope and a drowning, and we are anxious to "give the culprit the benefit of a doubt;" but we doubt whether his readers or ours will view the printer's mistake of twenty years in the figure 5 for a 3, as of any importance by the side of our well-sustained argument on facts in relation to those "twenty or thirty years" mentioned, and in several ways alluded to in the context of our March article.

Being anxious to confer praise wherever merit challenges its due, let us proclaim to the universal fraternity of coach-makers, that the London "Journal" aforesaid knows the difference between a "figure 5" and a "figure 3."

In a late number of the "Journal," received all the way from London, we observe one entire page printed twice, and another omitted altogether,—that is, we observe that it is not to be observed. The duplicate page and the missing page "occur" in two entirely distinct articles. This must be a refreshing reminder of English perfection to our contemporary's readers.

After all the desperate grabs of our London friend at our "wrong figger," he now says that it is "a circumstance known to nearly all the world," that Mr. Adams published his work on Pleasure Carriages in 1837. Well then, let "nearly all the world" rest contented. We are.

But our disputatious friend over in the city of fogs contrives to get quite jubilant about that typographical error, and actually tries to build a superstructure of reasoning upon the strength of his discovery. He culminates with, "Is it credible that the editor of the New York Coach-maker's Magazine should know so little of the present position of carriage-building in England as to be obliged to support his cause on opinions expressed in a work published nearly twenty-five years ago?"

Suppose we give a Yankee answer, in the form of a question. Is it credible that the editor of "The Carriage Builders' Art Journal" should know so little of the common fairness of argument, as to make our candid references to an author's opinions and statements entirely dependent upon the date when the quoted book happened to be first published?

We needed no information on the subject of carriage-building in England from the book of Mr. Adams. We had occasion to refer to it, in proof of our position that the absurd claims to perfection made by the London "Journal" were not only not sustained but contradicted by independent authors; and, in fact, we *proved our position*. Conscious of this, and observing that we have the approbation of Mr. T. R. Starey and other gentlemen of that class in England, we can afford to overlook the nu-

merous and malicious wanderings of our recent assailant in the "Journal."

In conclusion, the captious quotation by the English editor, that ours is "the best Magazine in the world," we accept as a truism; in confirmation of which we offer the fact that he extracts some of its *cream*, in the form of four entire articles, for his July issue, without giving us a word of credit therefor. We do not mention this circumstance in the way of finding fault, but because we would prefer seeing "the second best" stand on its own "bottom," and "acknowledging the [*stolen*] corn" like an honest man. We can, however, imagine a case where a starving man might be excused in breaking into our larder, and helping himself to the good things deposited there. Probably the action complained of is of this description, and since there is no *international* law for our protection, we can only deplore the degeneracy of the times, and bow submissively to circumstances.

OUR ADVERTISERS.

We owe an apology to our advertising friends for the long neglect with which we have treated them, in not editorially referring our readers to their cards. The fact is, we have not been able to find room to do so, because of the pressing demand upon our columns from correspondents, and important matter. We will now try to make amends for past remissness, and call attention to the advertisements of all that have not had such favors shown them since our issue in January last, premising that we do not admit any to our columns who can in the least be charged with "humbugging" the public. They are all worthy business men, whom we can cheerfully indorse as "good and true," from personal knowledge. They are as follows:

Axles.—A. H. Bonnell & Co., J. M. Post, Thos. Breese, Newark, New Jersey; J. H. Tuttle, N. Y.; and The Spring Perch and Tomlinson Axle Companies, Bridgeport, Conn.

Bands (Odometer & Beveled).—The Ives & Pardee Manufacturing Co., Mt. Carmel, Conn., and Hannah & Storm, Poughkeepsie, N. Y.

Bent Stuffs.—Smith & Barlows, Bridgeport, Conn., and J. B. Kilburn, Newark, N. J.

Carriage Bodies.—Barker & Baldwin, New Haven, Conn.

Carriage Hardware.—A. R. Van Nest & Co., Swift, Seaman & Co., F. S. Driscoll & Co., C. C. Dusenbury, and J. P. Jube & Co., New York City; H. D. Smith & Co., Plantsville; and C. Cowles & Co., New Haven, Conn.

Carriage Lamps and other Trimmings.—C. N. Lockwood, and Cary & Young, Newark, N. J.

Carriage-Lining Nails.—The Ives & Pardee Manufacturing Co., Mt. Carmel, Conn.

Carriage Spring-Locks.—Arnold Stivers, Newark, N. J.

Carriage Wood-Works.—Dann Bros., New Haven, Conn.

Danamora Iron Co.—16 Beekman St., N. Y. City.

Files (Re-cut).—J. F. Anderson, Haverstraw, N. Y.

Guard Wheel Machines.—C. H. Guard, Troy, N. Y.

Homogeneous Steel Tires.—Shortridge, Howell & Co., N. Y. City.

Hubs.—C. D. Ingham, Chittenango, N. Y., and Wm. Miles & Co., Newark, N. J.

Mouldings and Basket Imitation Woods.—Chas. Volkert, N. Y. City.

Name Plates.—D. H. Thomas, N. Y. City.

Springs and Axles.—The Spring Perch Co., and The Tomlinson Spring and Axle Co., Bridgeport, Conn.

Stitching Machines.—I. M. Singer & Co., N. Y. City.

Varnishes.—D. Price & Fitzgerald, S. P. Smith & Co., E. B. Hedden, and J. R. & C. P. Crockett & Co., Newark, N. J.; and William Tilden & Nephew, and for English Varnishes and Paints, F. S. Driscoll & Co., N. Y. City; and Stimson, Valentine & Co., Boston, Mass.

Wheels and Wheel Stuffs.—The New Haven Wheel Co., New Haven, and the Naugatuck Wheel Co., Naugatuck, Conn.

Reader! Did you ever *study* our advertising department? If not, you have lost much of the interest pertaining to our Journal, and you ought not to delay a moment without devouring so intellectual a feast. In the picture-wording thereof will be found the best key to the business character of individuals, and a fine school in which to learn how to become rich—as Dr. Johnson said on one occasion—"beyond the dreams of avarice." None but sensible people ever advertise, and to advertise in the New-York Coach-maker's Magazine *evinces the height of wisdom!* Some of our friends (and we have permission to name them) have thereby found more business than they could attend to! Those who are troubled with "the blues," are advised to "follow suit."

EDITORIAL CHIPS AND SHAVINGS.

Carriage-Making in Orange County, N. Y.—In our rambles a few days ago, we found ourself away from the noise and confusion of a city life, among the vine-clad hills of Orange county, at the little village of Chester, N. Y. One might suppose this place to be the last, "this side of sundown," in which to find a real, live carriage-maker, but on the contrary, we found our since new-made friend, S. Hadden, Esq., there snugly ensconced at the foot of a hill, in the full tide of a successful business, and apparently as happy as a lark, with plenty of business all the year round. No doubt the great secret of all this is,

that he makes good work, and pays strict attention to business. At the end of seven years he finds himself favored with a good and healthy country trade, and although yet but a young man, has secured a competency many persons older and longer in business might envy. "May his shadow never be less," and his tide of success never ebb.

Mormondom on the Road.—On the 24th of July, Salt Lake turned out *en masse*, to celebrate the 13th anniversary of the entrance of the Mormons into that valley. In the procession, were mule, ox, and horse teams to carts, carriages, and buggies, amounting to between two and three hundred vehicles. Ten carriages, with brother Brigham and his confreres' "household *goddesses*," were observed in the procession. One of the Prophet's carriages having upset in a creek, to the damaging of calico, two of his better halves were hurt some and frightened more. Great place, that Salt Lake, for carriages—and women!

Carriages at an English "Show."—At the Royal Agricultural Society's Show, lately held at Canterbury, England, Messrs. M'Naught and Smith of Worcester, exhibited some very elegant carriages. Among them was a wagonette, with concealed folding steps to the lady's side of the driving seat, and also to the door behind.

New York in Vehicular Motion.—There are at present, under license, 1,015 omnibuses, paying to the Corporation $20 each; 130 street rail-cars, paying $44 each; —— hackney-coaches, paying $5 each; 267 express wagons, paying $5.00 each; 328 charcoal wagons, paying $2.50 each; 6,288 public carts, paying $2.50 each; and 1,200 dirt carts, at a license of $1.00 each. The revenue of all these to the city amounts to about $10,000. Could we get at the number of private buggies, carriages, &c., with the value, the metropolis would, for these alone, present a formidable array of figures, and prove that we are truly "a go-ahead people."

Flying Chariots.—Good, in his Book of Nature, asks, "Why have not the monsters of the sky been appropriated to the use of man? How comes it that he who has subdued the ocean, cultivated the earth, and harnessed elephants, and even lions to his chariot wheels, should have never availed himself of the wings of the eagle, the vulture or the frigate pelican? How comes it that, having conquered the difficulty of ascending into the atmosphere, and ascertained the position of traveling at the rate of eighty miles an hour through its void regions, he should yet allow himself to be the mere sport of the whirlwind, and not tame to his use, and harness to his car, the winged strength of those ærial racers, and thus stamp with reality some of the boldest fictions of the heathen poets?" Just because the subject is more *poetical* than practical.

Traveling between New York and Philadelphia One Hundred Years Ago.—The following advertisement was given in the papers an hundred years ago. It will serve to give the reader a general idea of the speed of the "flying-coaches" of that day, and the manner in which they performed the journey: "*Philadelphia Stage Waggon*, and *New York Stage-Boat*, *performs* their *Stages* twice a *Week*. John Butler, with his waggon, sets out on Mondays from his House, at the Sign of the Death of the Fox, in Strawberry-ally (Philadelphia), and drives the same day to Trenton Ferry, where Francis Holman meets him, and proceeds on Tuesday to Brunswick, and the passengers and goods being shifted into the waggon of Isaac Fitzrandolph's the same day, where Ruben Fitzrandolph, with a boat well suited, will receive them, and take them to New York that night. John Butler returning to Philadelphia on Tuesday with the passengers and goods delivered to him by Francis Holman, will again set out for Trenton Ferry on Thursday, and Francis Holman, &c., will carry his passengers and goods, with the same expedition as above to New York.—March 8, 1759."

Fastening Tires with Oil!—The following silly paragraph is credited to the *Southern Planter*. A correspondent tells the editor:—"I ironed a wagon some years ago, for my own use, and before putting on the tires I filled the felloes with linseed oil; and the tires have worn out, and were never loose. I ironed a buggy seven years ago, and the tires are now as tight as when first put on. My method of filling the felloes with oil is as follows: I use a long cast-iron oil heater, made for the purpose; the oil is brought to a boiling heat, the wheel is placed on a stick, so as to hang in the oil, each felloe one hour, for a common sized felloe. The timber should be dry, as green timber will not take oil [and, we will add, none but a *green 'un* will try the experiment.] Care should be taken that the oil be not made hotter than a boiling heat, in order that the timber be not burnt. Timber filled with oil is not susceptible of water, and the timber is much more durable. [But here comes the funny part of the story.] I was amused, some time ago, when I told a blacksmith how to keep tires tight on wheels, by his telling me it was a profitable business to tighten tires; and the wagon-maker will say it is profitable to him to make and repair wheels; but what will the farmer, who supports the wheelwright and smith, say?" Whatever they may say, we say fearlessly, that it would require at least ten "cullored pussons" to hold the felloes on the spokes, that's all!

Verdancy in an Omnibus.—The following, from the *Times*, is too good to be lost:—"On Saturday afternoon, the passengers of one of the Broadway coaches enjoyed an entertainment, which alone was worth the price of admission to the stage, in the spectacle of a countryman, apparently enjoying his first metropolitan visit. Complacent

smiles rested on his face, and his Sunday clothes on his back. His enjoyment of the gay sight which Broadway windows and sidewalks always present was only occasionally chilled by a shudder of fright, as the horses jerked their load through places that seemed too narrow for successful passage, or dodged the poles of adverse coaches or teams at the cross-street corners. 'Verily,' he seemed to be thinking to himself, 'this beats our town all to smash.' When the coach, however, came within five or six blocks of the street at which he wished to stop, he became sensibly nervous, fidgeted much in his seat, and seemed very fearful that he should be carried by. At length his anxiety overcame every consideration but that of bashfulness, and springing upon his own feet and everybody else's, he staggered under the jolting motion of the coach to the aperture through which the fares are paid, and disregarding the strap that hung within his reach, pushed his arm through to the shoulder, and worried the driver's elbow, till he partially reined up his studs and turned to see what was the trouble. The street was full of rattling noise, so that conversation could only be carried on in shouts; but the distracted passenger did'nt forget the teachings of modesty, but putting his hand to his mouth, communicated, in a most confidential whisper, to the driver, the unobtrusive remark, that he 'wanted to get out here.' As he stepped upon the ground he looked back at the coach with a shudder that seemed to say, 'There, I am out alive! Catch me in one of those rattles again!' But his troubles were not over, for he had yet to recover his trunk from the roof. At this point the driver informed him that the street at which he wished to stop was three blocks above. So he ran along by the coach's side, dodging vehicles, looking for street signs, and eyeing his trunk, to the infinite amusement of the passengers. His property was finally delivered to him, and with a joyful step he bore it on his shoulder away, apparently head-full of his new experience in a Broadway coach.

Traction Engines for Common Roads.—A very successful trial journey from Manchester to Oldham has just been made with a new traction engine, which has been manufactured by Messrs. Edward T. Bellhouse & Co., of Manchester, on Boydell's principle, to be sent out to Rio de Janeiro, for Messrs. Carruthers, De Castro & Co. The engine, weighing about fifteen tons, with a train of six wagons, loaded each with three tons of iron, making on the whole a weight of forty-five tons, was taken from Zara street, through the streets of the city, to Oldham road, and on to Oldham. The engine performed its duty well, proceeding at the rate of two and three miles per hour, and turning sharp corners with facility and accuracy, answering to the will of the steersman with wonderful promptness. The steep hills at Oldham were ascended at a pace of above two miles an hour with the heavy load, and one of the inclines mounted was at a rise of seven inches in ten feet, or a gradient of about one in seventeen. Traction engines for the conveyance of great weights on common roads, are gradually growing into necessities of the times.

Carriages in Ohio.—It is said that there are 290,909 carriages in the State of Ohio, valued at $10,246,043.

The Coach-Maker's Letter-Box.

LETTER FROM CALIFORNIA.

Sacramento, Aug. 19th, 1860.

E. M. Stratton, Esq.:—*Dear Sir*, I am engaged in the carriage-business here, and find I want something for a guide to the fashions, in order that I may keep somewhere within sight of those at home; and I therefore send to subscribe to the Magazine.

We are getting to build as good work as any one can send us; it will certainly stand longer. I have now been here but two years, but have traveled about a good deal in that time. I have seen and learned how things are done. This is the hardest country in the world on carriages. At this season of the year they get so dried up that they have to keep tightening the tire; and then when the rainy season sets in, they all swell up again. I have seen them so swelled up that it has burst the tires. I do not believe that there can be any work shipped to this market that will stand with the work built here.

We are gaining ground here every day, and in a few years more will drive out importation, as we will be able to build all the carriages the country calls for. We shall, however, have to look to your States for the stock, as we have not got the first stick. We have to pay for all the stock we use here.

Time is getting short, but I must say one word to my brother chips; that is, not to come out here if they can make their board at home, as the country is so full of workmen at present, that we can find them that will work for $30 per month and their board, and there are lots who cannot even find work at that price. When I get time, I will write you a long letter about the crops in California. This is our busy season. Your Magazine is just the thing for us out here. Yours, in haste, J. E. Roberts.

LETTER FROM CONNECTICUT.

New Haven, Aug. 29th, 1860.

Mr. Editor:—*Dear Sir*, Your valuable Magazine comes along very regularly at the first of the month, and I cannot help congratulating you on its improved appearance in paper and printing. The letter-press, too, is very interesting. Business with us, just now, is rather dull, no doubt in a great measure caused by the unwonted interest everybody seems to take in public affairs—in President-making. This may be a matter of interest to politicians, but to the poor jours., with families to provide for, it is anything but pleasant to contemplate in view of a long and severe winter. [Here we omit a few lines, as to publish them would involve us in political matters, with which we have nothing to do, in this Magazine.] You have, in this Magazine, called for the track of carriages in different localities. In Connecticut this is 4 feet 2 inches from center to center. I learn that in Boston, Mass., it is 5 feet 3 inches from center to center. Hoping that matters will turn out better than anticipated, I am

Yours, truly, A. H.

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

AMERICAN PATENTED INVENTIONS.

*** To Inventors.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

Aug. 7. An Improved Machine for Upsetting Tire.—Orlando Foster, of Kenosha, Wis.: I claim the jaw, A, movable jaw, B. toothed cams, D D, dies, F F, eccentric lever, C, swaging block, 1, punching block, 2, and shears, 3, as they are arranged, in relation to each other, and operated as set forth.

An Improved Machine for Upsetting Tire.—Joseph Olmstead and W. A. Walker, of Victoria, Ill.: I claim the combination with the stationary and movable plates, C C′, and their blocks, A A′, and jointed dogs, D D, with the lever and connecting rod, E E′, and the hand lever and toggle-jointed levers, J G G′, all arranged and operating conjointly, in the manner and for the purposes set forth.

An Improved Machine for Upsetting Tire.—C. V. Statler, of Wataga, Ill.: I claim the dogs, D D′. and E E′, with adjustable bar, G, and its springs, *d d*, in combination with the jointed levers, A A, operated by the screw and link, C C′, and arranged substantially in the manner and for the purposes set forth.

An Improvement in Wheels for Vehicles.—T. C. Hendry (assignor to himself, J. Dillworth, S. H. Dean, T. J. Hutson, E. H. Patterson, and A. J. Hendry), of Congress, Ga.: I claim the hub, A, constructed of two parts, *a*, *v*, the former having radial recesses to receive the inner ends of the spokes, in combination with the screws, H, fitted in the annular recess, *g*, of the part, *a*, provided with nuts, *i*, so arranged as to form the bearings of the inner ends of the spokes, as and for the purpose herein set forth.

An Improved Self-Locking Device for Omnibus Registers.—Michael Offley (assignor to himself and Wm. Colton), of Baltimore, Md.: I claim the combination of the pin, *m*, with the arm *n* 3, when arranged for joint operation, substantially as herein described, for the purpose set forth.

Aug. 14. An Improved Machine for Bending Tires.—Wm. Bailey, of London Grove, Pa.: I claim the roller, F, when adjusted vertically through the medium of the frame, E, and double inclined plane, G, and the bridle, D, with its hooked legs, *d d*, and screw, *e*, when they are arranged in respect to and in combination with the continuous wheel, C, substantially as described and for the purpose specified.

An Improvement in Wagon-Springs.—Nicholas Jenkins, of New York city: I claim the combination, with the springs, A A, of friction plates, G, springs, *g*, and set screws, *h*, constructed and operating substantially as and for the purpose described.

An Improvement in Carriage-Springs.—G. H. Lamb, of Newark, Mo.: I claim the arrangement and combination of flat curved springs, C C, and arms, A A′, when said arms are controlled by the segment gear on the contiguous portion of said arms and by the action of spiral spring, K, as described and represented.

An Improvement in attaching Thills to Vehicles.—E. H. Plant, of Plantsville, Conn.: I claim the employment of the wedge, L, screw, *e*, and nut, H, in combination with the axle, A, slotted plate, G, strap, D, bar, F, and pintle, G, as shown and described, so that by depressing the wedge, E, the strap, D, with pintle, G, will be carried towards the plate, C, and the bearing of the pintle, G, between the strap, D, and the end of plate, C, will be tightened, all as set forth.

An Improved Wrench and Vise.—Wm. Russell, of Stoughton, Mass.: I claim the combination of the bar, A, jaws, B C, screw, D, provided with a detachable handle, E, and the socket, F, arranged as shown to form a new and useful article of manufacture, for the purpose specified.

Aug. 28. An Improvement in Self-Acting Wagon-Brakes.—George Buchanan, of Hickory, Pa.: I claim the arrangement of the brake, *e*, bar, *g*, rods, *x* and *m*, strap, Y, springs, *q* and *v*, and cords or chains, *d*, when used in combination with cars, wagons, and carriages, the whole being arranged, combined, constructed, and operated as described, and for the purpose set forth.

Sept. 4. Improvement in Carriages.—G. W. Efner and S. A. Sperry, of Ann Arbor, Mich.: We claim the hollow axle, B, in combination with the double spring catch, D, and the manner of operating the same by turning the spring within the elliptical opening at the outer end on the axle, as a mode of attaching and detaching the wheel.

We also claim the hollow axle, B, in combination with spiral spring, K, spring lever, I, and through brace, M, operating together in the manner described, as a carriage spring.

Improvement in Carriages.—E. S. Wicklin and J. D. Weaver, of Carlinville, Ill.: We claim a buggy seat, divided, or not, hinged to the back end of the floor of the buggy, and furnished with stepping boards on its under side, substantially as set forth, so as to serve the two-fold purpose of a seat and as steps by which to enter or leave the buggy from behind.

Improvement in Extension Carriages.—J. A. Naylor, of Rahway, N. J.: I claim the arrangement of the draw front, B, folding seat, G, and seat, F, substantially as described and for the purpose set forth.

Converting Iron into Steel.—E. G. Pomeroy, of New York city: I claim the conversion of iron into steel by its treatment in the molten style with the compound of potash or other alkali, carbonate of lime, oxide of manganese and charcoal, substantially in the manner specified.

RECENT EUROPEAN PATENTED INVENTIONS.

February 3. William Howes & William Burley, Birmingham, Warwickshire—A new or improved method of attaching lamps and whip sockets to carriages.

February 4. James Taylor, Birkenhead—Improvements in locomotive engines and wheel carriages.

February 6.—James E. Boyd, Hither Green, Kent—Improvements in carriages and other conveyances used for the conveyance of children, adults, and invalids.

February 8. James Cocker, Liverpool—Improved aparatus for indicating the number of passengers carried by public vehicles.

February 11. David Deitz, Boulevard de Strasbourg, Paris—An improved oil box for lubricating the axle-trees of railway carriages or wagons; applicable also to the shafts of all kinds of machines.

14. John S. Lillie, Pall Mall, London—Improvements in carriage-ways.

April 7. William Clark, Chancery Lane, London—Improvements in axles or journals in combination with lubricating axle-boxes for railway and other carriages.

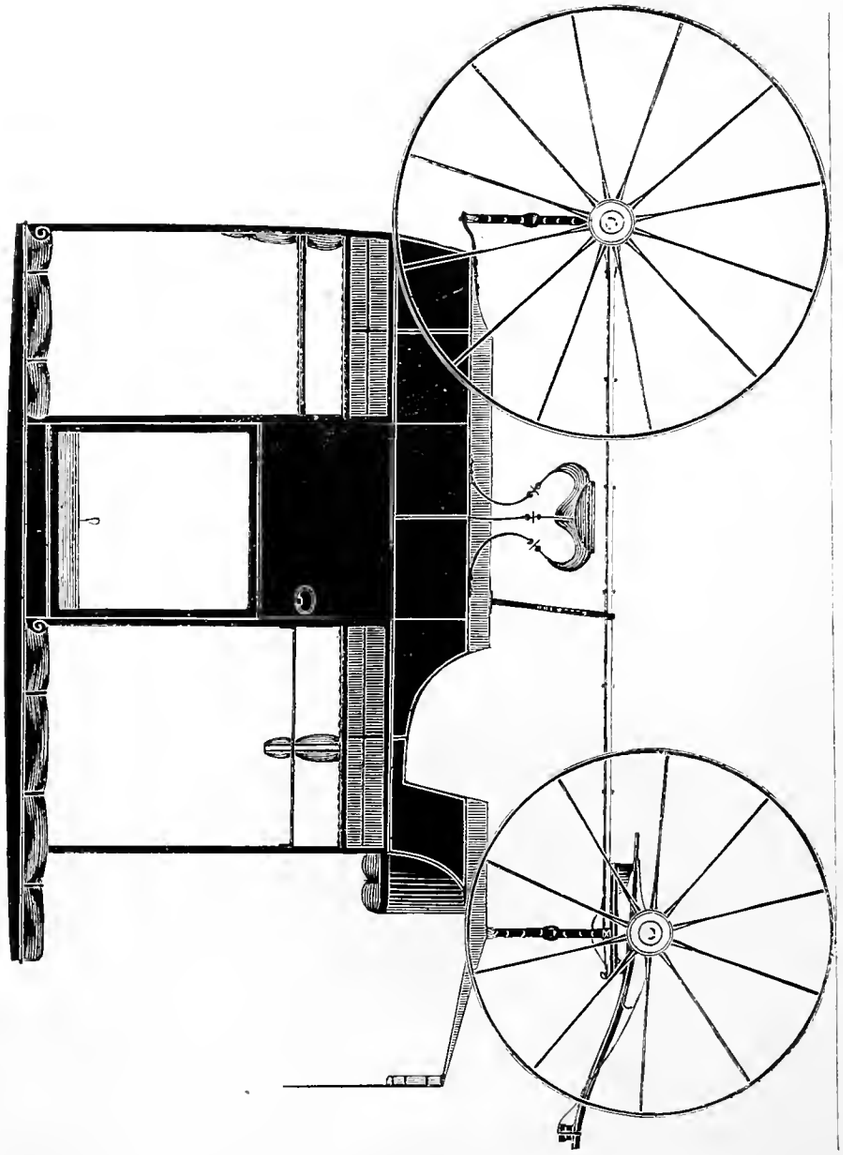
17. William Carmont and Wm. Corbett, Clayton, near Manchester—An improvement in casting steel tires for wheels, which is also applicable to casting articles of steel.

27. Franz Thonet, Vienna, Austria—Improvement in the construction of wooden wheels.

May 10. Alexander Wilson, Edinburgh—Improvements in the construction of railway carriages, wagons, and trucks, which improvements are also applicable to vehicles for common roads.

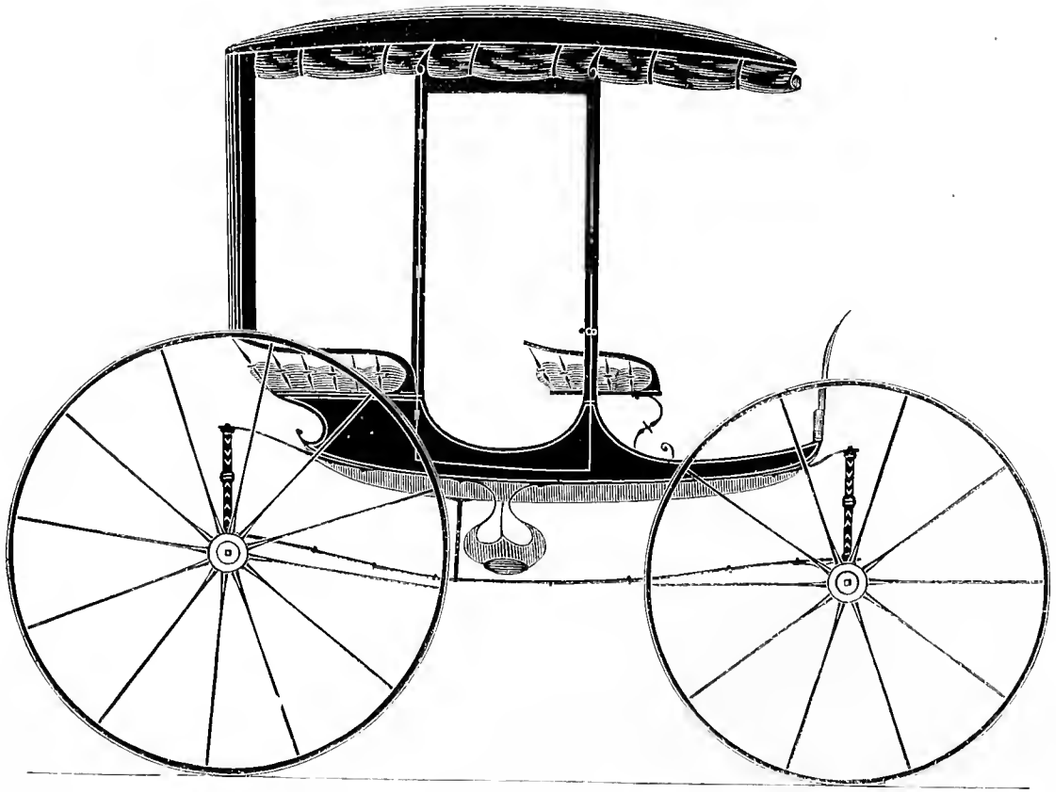
June 1. George Parsons, Martock, Somersetshire—Improvements in the manufacture of carts, wagons and drays.

7. James P. Bath, Aigbuth, near Liverpool, Lancashire—Improvements applicable to carriage wheels for use on common highways, railroads, or tramways.



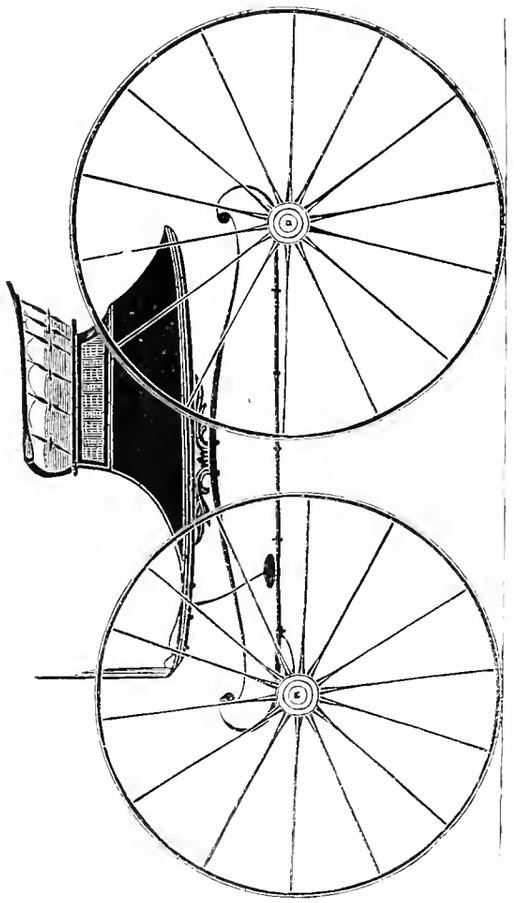
SKIDDY ROCKAWAY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 111.



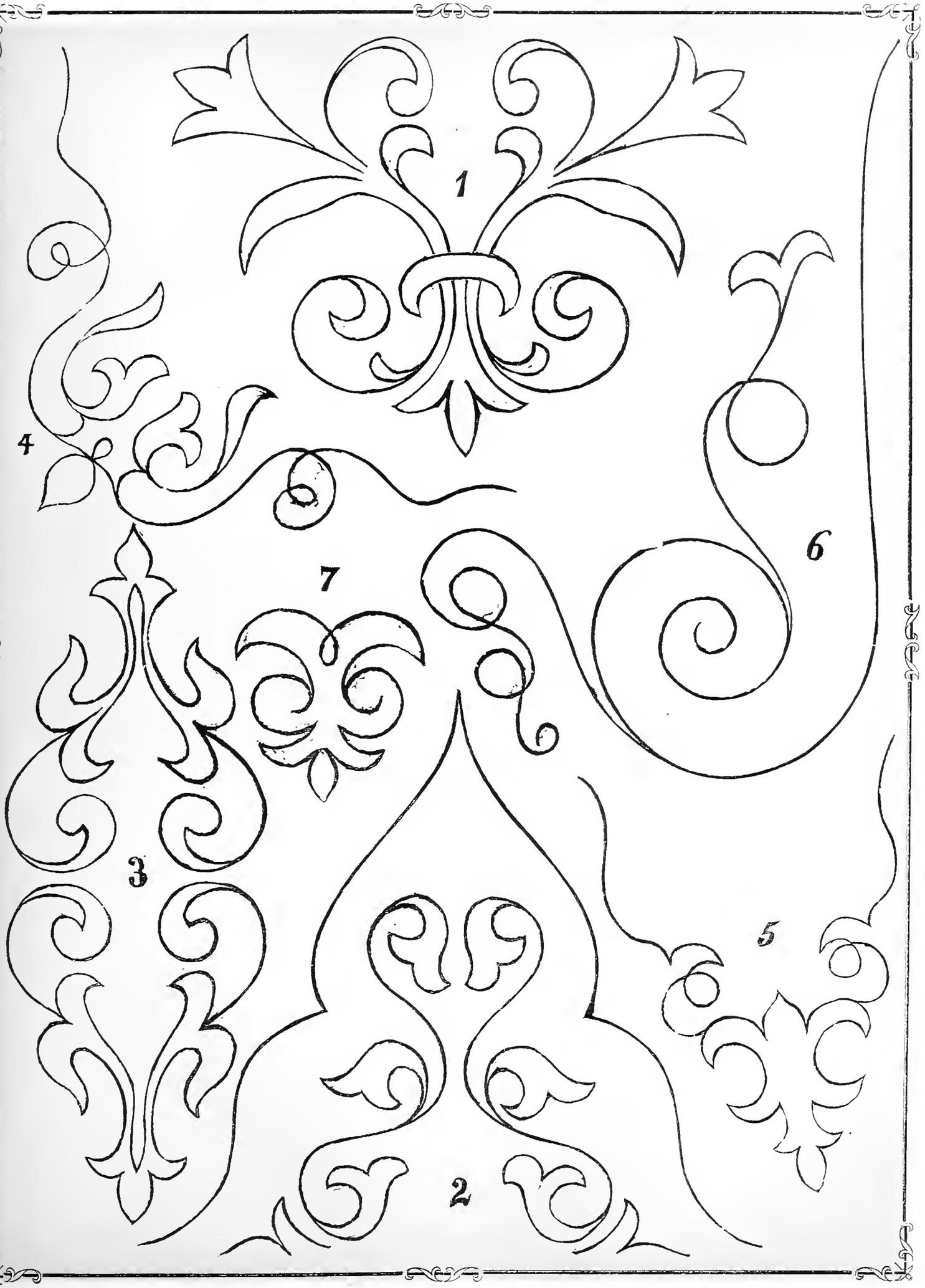
WHITTIER ROCKAWAY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—*Explained on page* 111.



CRADLE-SPRING BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 111.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caught thus easily, and we both went flying over the prairie as though engaged in an Olympian game of ancient times. She was an excellent rider; she sat in her saddle with that ease and grace only to be learned by much experience and long practice, which, I imagine, could not be said of me. We soon reached the grove, and for half a mile after entering it our road wound among the young trees, and then descended a steep hill to a small stream.

Thus far our race had been an even one, but now I imagined her horse began to show signs of fatigue. At all events, I gained on her, and crossing the stream I rode up to her side. Looking up at me with a face more beautiful than ever, as the rich blood tinted her cheeks with a rosy hue, caused by the violent exercise, she laughed gaily, disclosing a set of pearly teeth in delightful contrast to the dark auburn hair that had escaped from its confinement and fallen in a profusion of ringlets on her neck and shoulders. Returning her laugh, I addressed her with, "We have had quite an exciting race over the prairie, and I must confess that I have found my match for once."

"Quite a race," she replied; "but I should suppose it was rather unpleasant after your mishap at 'Muddy Corners,' as we call the place where you took your cold bath."

"Not at all unpleasant, madam; for in the excitement I entirely forgot that little adventure."

"Your mind must be happily organized, if such is the case," she said laughing; and then added, "you must forgive me for laughing, but really you presented such a ludicrous figure, I could not help it, and I fear you will think I have very bad manners."

"Give yourself no uneasiness about that," I answered. "The thought of it causes me some merriment, and I could laugh as heartily as any one if I were not a stranger here; but that is somewhat embarrassing."

"Do you intend living in Prairieville?" she asked, dexterously changing the subject.

"That is uncertain," I replied; "I was so well pleased with its appearance when I first entered it, that I concluded to stay a few days at least; and this morning was so beautiful, I could not resist the temptation of taking a gallop on the prairie."

"We both had the same mind in that respect, as you are aware," she said. "How do you like our prairie country?"

"Delightful!" I answered; and as I was in a talking humor, I continued—"Nature, beautiful in every mood, whether reigning on the ocean, where the crested waves gambol like children at play; in the smiling valleys, where the calm-flowing river winds among rich fields and between flowery banks; in the gloomy forests, where the tall trees bend like reeds before the tornado's track; or on the mountain's loftiest peak, crowned with eternal snows that glisten like burnished silver in the cold sunbeams, while the jagged rocks, piled up in rugged layers, seem formed as impregnable battlements to stop the daring hand of progress, that would fain level the wildest range and span it with an iron belt,—in all these places she is beautiful, but here she is absolutely charming. These are her gardens, as the poet tells us, where she presents her floral offerings to her God. There is almost too much desolation, however, and I should think a person used to rough hills and peaceful valleys would soon tire of the dreary monotony; but then I always love the solitude of a wilderness—I passed through a great one this morning."

"A wilderness!" she asked, in a tone betraying a wish for me to explain myself more clearly.

"Certainly," I answered. "Giant forest-trees, that twine their graceful branches together like glistening swords when two hostile armies meet in close engagement, do not form the wilderness, but instead, it is solitude—that solitude which is formed by a total absence of what we call civilization. Nowhere can it be found or felt more oppressively than on one of your houseless prairies; and I traveled several miles this morning without seeing a habitation. Nought but solitude reigned about me; a wilderness of silence and desolation, relieved only by waving grass and blooming flowers. No familiar old tree lifted up its head, and invited me to rest beneath its verdant foliage in the cool shade; I could not go up to it and lean against its rough trunk, and say, 'How are you, my old friend?' while the delicate little twigs that tipped the long branches, nodded familiarly to my greeting, and whispered back, 'Glad to see you; take a seat and make yourself comfortable;' as I fancy they would do if they had the power of speech."

"You must love the woods, sir?"

"I do, with a love bordering on devotion. I used to run away from school, when a mere boy, and pass the long summer days in the 'great forest,' as we called a hundred-acre tract near where I was born; not because I hated my books, but because I loved the trees better. I could tell the name and peculiarities of every tree and bud that grew along our rugged coast, and that boyhood passion has strengthened with my years. Some of the pleasantest days I have known were passed in the forests of Ohio, where one can wander for many miles without seeing a sign that tells him a woodman's ax has ever woke the echoes of those gloomy solitudes."

"I, too, love the woods," she said, after a moment's pause, "especially at this season of the year, when the trees present such a gaudy array of colors. Are you from Ohio?"

"I have lived there for a couple of years," I answered.

"I asked the question because it is my native State," she said; "and you know persons from the same neighborhood, although unacquainted personally, seem like old friends when they meet so far away."

"Then I hope we may be good friends, providing I am permitted to continue the acquaintance so romantically commenced."

So deeply engaged was I in the above conversation, that I did not notice the progress we had made until my companion reigned her horse up to a block, and sprang from the saddle. Looking about me, I noticed we had gained the edge of the grove, and just before us was a large farm-house, while beyond a highly improved farm extended far out on the prairie. "This," said she, "is the place I call home; and I should be pleased to have you walk in, for I cannot think of your going in town presenting such an appearance."

The invitation appeared to be honestly given, and, after a moment's hesitation, I determined to accept it. Securing the horses, we passed up the broad walk, and on arriving at the door-steps, my companion whispered, "I came near forgetting to ask your name."

"Clifford—Clarence Clifford, at your service," I replied.

Without giving me an opportunity to inquire her name, she opened the door and ushered me in the family

sitting-room. It contained but one occupant, an elderly lady who sat in an easy-rocker, engaged in sewing. As we entered she looked up from her work and said, "Why, Thalia, dear, have you returned already? I did not expect you before evening."

"I thought I would surprise you once by returning in good time," she answered; then turning partly towards me, she added, "Let me make you acquainted with Mr. Clifford. Mr. Clifford, my mother."

And what is your mother's name, thought I, but as I could not find out without having an awkward scene, I bowed low, and bid her good morning, with the best grace I could muster under the circumstances. The old lady drew her specks down over her eyes, as though to take a good survey of my general appearance, and I was about to make an apology by explaining matters, when Miss Thalia anticipated me by saying, in her gayest humor—

"You must not criticise the gentleman's appearance, Ma, for I found him floundering in the mud-hole at 'Muddy Corners,' prompted, no doubt, by curiosity to ascertain the depth of our prairie soil; and acting the part of a good Samaritan, as you have taught me to do, I took compassion on him and brought him home with me."

The old lady smiled faintly at her daughter's remark, and said—

"Well, my dear, go and get some water in the wash-room for Mr. Clifford's use."

Humming a merry tune, she left the room, and while she was absent I gave her mother a detailed account of my morning's adventure, and she manifested her interest by laying down her work, and devoting her whole attention to my narration. In a few minutes her daughter returned, and showed me to the wash-room. After closing the door, I went up to the mirror and took a survey of my person. I must confess that I laughed outright at the appearance I presented. My face was covered with blotches of mud, from the size of a pigeon-shot up to a dime, while my linen, so clean and glossy in the morning, was fancifully ornamented with the same material. After an hour's faithful labor I had removed the most conspicuous stains, and presented a very passable appearance. Returning to the sitting-room, Miss Thalia complimented me in the highest terms, with a little irony thrown in for spice, on my improved looks, and taking a seat near the window, we commenced an animated conversation on some pleasing topic, which was finally interrupted by her mother, who said—

"It is nearly noon, Thalia, you had better go and assist Blanche about dinner."

Skipping out of the room as lightly as a fawn, I was left alone with the old lady.

It is an infallible rule, as I have learned it after much experience, if you wish to make a friend of a girl you must make a favorable impression, and gain the good esteem of her mother;—it makes not so much difference with the father, but the mother, always;—and at this task I now applied myself. Summoning all my knowledge of human nature, I read the physiognomy of her face, the phrenology of her head, and weighed my deductions with consummate care. That face—it must have been the counterpart of her daughter's when young, consequently very beautiful, and a pleasant smile of good nature, so habitual of a kind disposition, rested naturally about her mouth. In a word, you could read as plainly as though written in large capitals, the great principle of a woman's life—motherly love—so broad and deep that it did not confine itself by the ties of consanguinity, but encircled all true souls and generous hearts in its boundless compass. We were soon conversing as familiarly as though we had been acquainted for years instead of minutes. After a variety of subjects had been touched, wherein I learned that her husband had been dead a few years, I spoke of the comforts of a pleasant home, where the wearied mind could repose from the toils and cares of a busy world.

"Have you a home?" she asked, in a low, serious tone.

"One of the best in the world," I answered; "which you may think is saying a good deal, when there are so many pleasant ones. In one of the most lovely valleys of New Jersey, with a rocky ledge to the west, from the summit of which you can see the great metropolis of the Western World, with the heights of Long Island, the Narrows, and Sandy Hook, with its trio of light-houses beyond,—down in that valley is the home of my childhood, and there lives one of the best of mothers, wondering, perhaps, at this moment, where her wandering boy is, if he is well, and asking herself the question, 'When will he come home? the only link broken from our family circle.'"

The old lady let her sewing fall in her lap, and her hands remained inactive as I spoke.

"You should go and see her," she said. "Ah! you thoughtless boys know not the depth of a mother's love, nor the bitter anguish they feel when they look around the family circle and miss one dear face. How long since you saw her?"

"Nearly three years," I answered.

"A long time to be absent," she said; "and here you are, a thousand miles away. I passed my childhood in Connecticut."

"What place?" I asked.

"Stratford; a small town on the Sound."

"I have often been there, and a pretty place it is, too." She turned towards me with a look that seemed to say, go on. "I lived in the town of B——, only five miles distant, as you are aware, and as one of my most intimate friends was from Stratford, I often accompanied him home to spend the Sabbath."

"What was his name?" she asked.

"Bradley."

"Do you know his father's name?"

Her voice sank almost to a whisper as she asked the question, and I drew my chair still nearer, and answered, "John, if I mistake not; he has been dead several years, however, and I never saw him."

At the mention of the name she gave a nervous start, and when I spoke of his death, a low, half-suppressed sigh escaped her lips, and fixing her eyes on the wide fireplace, where cedar boughs and sparrowgrass were gracefully twined in gothic arches, she remained motionless. What strange memories of our childhood linger around all our hearts! That answer had opened the door that led to the inner temples of her soul—doors that had been closed for years, and the sigh was only the creaking of rusty hinges.

"The memories of our youthful days," I continued, "form the sweetest morsels for the meditations of old age. The broad valley, from the rocky ledge before mentioned, up to where the Passaic pours down the frightful chasm at Paterson, or, controlled by the inventive genius

of man, is turned off in a tranquil channel, causing a thousand ponderous wheels to revolve in the factories below; all along its winding course, where it flows in an almost imperceptible current, loitering along its verdant banks to toy with the white lillies, or the graceful branches of the weeping-willow, down to where it receives the Hackensack in its embrace and widens in the Newark meadows; on, past Bergen Point, to where it is lost in the darker waters of the bay,—all this broad, smiling valley was the play-ground of my boyhood. Those ancient groves and walls of rock, now echo back the voices of a younger generation that once gave back my lusty shout."

I do not remember all I said, for I talked on for several minutes, but I do not believe she heard a word, for she was living her young days over again, along the sandy shores of Long Island Sound, and up to the valley of the Housatonic.

I was interrupted by the opening of the hall-door, and Mr. Charles Myrtle, my acquaintance of the village tavern, entered with the unmistakable freedom of one who was at home.

He advanced towards me, and taking my hand, exclaimed, "I am glad to see you here, Mr. Clifford. I called at the hotel just before leaving town to invite you out, but found you had gone riding somewhere. Mother, are you acquainted with Mr. Clifford? This is the gentleman I was speaking of this morning."

"Yes!" she answered, rousing from her reverie. "Your sister introduced him."

And thus I learned the name of my morning's companion—Thalia Myrtle. Things were working admirably.

At this moment Thalia entered and invited us out to dinner, and a pleasant meal it was. As her brother was yet in the dark as to how our acquaintance was formed, she recounted the incidents of the morning in her own peculiar manner, describing with the most exact minuteness my fall from the horse, the way I floundered through the mud, and finally, my appearance when she passed me, and we all laughed heartily at her recital. When she had finished, I said, "I thought at the time that it was a very unfortunate accident, but that only proves our short-sightedness; I now consider it the most pleasing occurrence of my life, in thus introducing me to such kind friends."

On how small a hinge does the great door of destiny sometimes turn? We can look back and see some trifling incident, unthought of at the time, which was the great turning point of our whole existence. From that moment our life changed into another channel, and instead of the bright future *we* had pictured, our path led over dark and gloomy moors, where the *Ignis-fatuus* of professed friendship, perhaps of false love, lured us on to a swift destruction. Was this incident in my history destined to be fraught with such great import? or was it merely an hour's pastime, to be forgotten in a day? I asked that question to myself, but fortunately for our own happiness, we can speculate, but not prophesy—the future to our limited vision is a sealed book, and we must wait until time turns the leaves ere we can read our destiny.

When dinner was over, Charles and I took a walk over the farm to look at the different improvements he had made during the season, and returning, I passed the remainder of the afternoon with Thalia. Just as the sun was sinking behind the far-off groves, I prepared to depart, for I had already lingered there too long.

"You will find it very lonesome in Prairieville," said Mrs. Myrtle, "and we should be pleased to see you here at any time; and Thalia seconded the invitation warmly. Promising to visit them at least once before I left the State, I bid them good evening, and proceeded slowly towards the village.

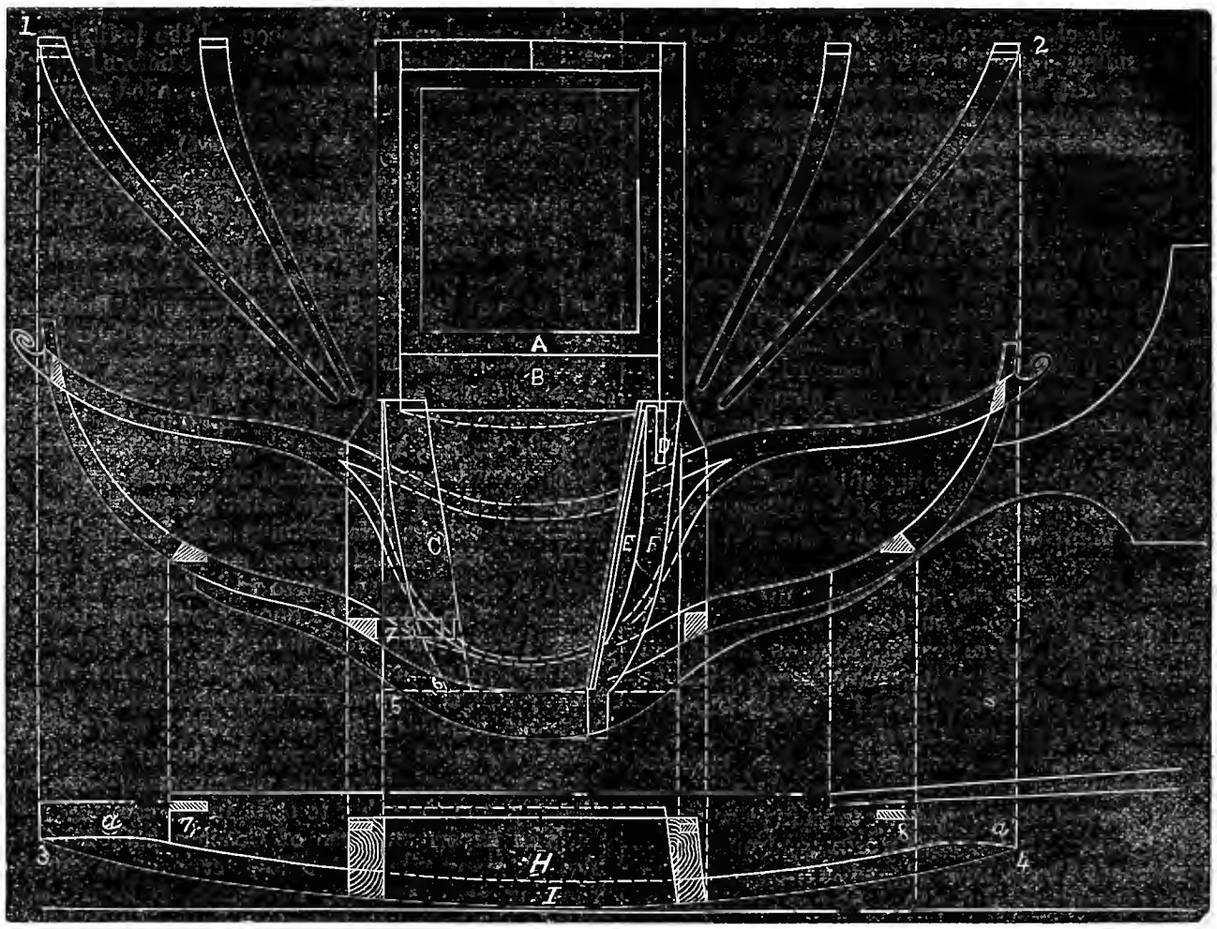
(*To be continued.*)

TAYLOR'S DIATRIBE AGAINST COACHES.

If the curses of people that are wronged by them might have prevailed, sure I think the most part of them had been at the devil many years ago. Butchers cannot pass with their cattle for them; market folks which bring provision of victual to the city, are stopt, staid, and hindered. Carts and waines, with their necessary ladings, are debarred and letted; the milk-maids' ware is often spilt in the dirt, and people's guts like to be crushed out, being crowded and shrouded up against stalls or stoops, whilst Mistress Silverpin with her pander, and a pair of crammed pullets, ride grinning and deriding in their hell-carts at their miseries who go on foot. I myself have been so served, when I have wished them all in the great Breach, or on a light fire upon Hounslow Heath or Salisbury Plain; and their damming of the streets in this manner, where people are wedged together that they can hardly stir, is a main and great advantage to the most virtuous Mysterie of purse-cutting; and, for anything I know, the hired or hackney Coachman may join in the confederacy and share with the cut-purse,—one to stop up the way, and the other to shift in the crowd.

The superfluous use of Coaches hath been the occasion of many vile and odious crimes, as murder, theft, cheating, and hangings, whippings, pillories, stocks, and cages; for housekeeping never decayed till Coaches came into England, till which time those were accounted the best men, who had most followers and retainers; then noble the acre, yearly; and a ten-pound house-rent now, was scarce twenty shillings then; but the witchcraft of the Coach quickly mounted the price of all things (except poor men's labor), and withal transformed, in some places, 10, 20, 30, 40, 50, 60, or 100 proper serving-men, into two or three animals, *videlicet*, a butterfly Page, a trotting foot-man, a stiff-drinking coachman, a cook, a clark, a steward, and a butler; which hath enforced many a discarded tall fellow (through want of means to live, and grace to guide him in his poverty) to fall into such mischievous actions before named; for which I think the gallowses in England have devoured as many lusty, valient men within these thirty or forty years, as would have been a sufficient army to beat the foes of Christ out of Christendom, and marching to Constantinople, have plucked the Great Turk by the beard; but as is aforesaid, this is the age wherein the world runs on wheels.—*Taylor the Water Poet's Works, part* 2, *p.* 242.

Early Hackney Coaches.—It is worth observation, that in the first year of the reign of King Charles, no hackney coaches did stand in the streets, but in their stables, and they were sent to come abroad by those who had occasion to use them; and there were not above twenty coaches at that time to be had for hire in and about London. The grave judges of the law constantly ride on horseback in all weathers to Westminster.—*Laud's History of his Troubles.*



ELCHO SOCIABLE LANDAU, WITH CANT-BOARD.—$\frac{3}{4}$ IN. SCALE.

ENGLISH CARRIAGE ARCHITECTURE.—NO. VI.

THIS variation from the prevailing style of "Sociable Landau," has lately been introduced by Messrs. Rigby & Robinson, of London, and is much admired for its elegance of form. The original was made for Lord Elcho, from whom it takes its name.

In drafting, proceed and take the distance from 1 to 2, as shown on the body.

2. Lay down the elbow-line, extending from 3 to 4, as shown on the cant-board.

3. Get the turn-under of the standing-pillars, as shown on the body, 5 to 6. All the standing-pillars of this body are the same in length and turn-under.

4. The bottom-side line is obtained by taking the distance from 7 to 8, as shown on the cant, and also the width as shown on the body.

5. In order to get the glass frame the right depth for the shallow door, a narrow shutter or panel is made to fall into a second groove in the door, as drawn on the door pillar; this shutter is first raised, and the glass frame is drawn up and rests on the top of it, as shown on the body, which makes up the required depth.

6. The peculiarity of this body is, that the elbows, bottom-side, and standing-pillars, are all worked up to one sweep. The lines are easy and graceful, and altogether, its novelty and elegance attract attention, and produce a most pleasing effect.—*Carriage Builders' Art Journal.*

NOTE.—The letter A represents the glass frame; B, the panel or shutter; C, the standing-pillar; D, the shutter; E, the glass frame down; F, the door-pillar; *a a* the corner pillars; H, the bottom-side, and I, the elbow-line.

For the New York Coach-maker's Magazine.

BIOGRAPHY OF ROBERT B. CAMPFIELD, ESQ.

(*Continued from page* 82.)

CONVINCED that the business of carriage-making could be more advantageously carried on both to the public and himself, were all branches directed by one mind, Mr. Campfield located himself on the premises now known as 359 Broad street, Newark, New Jersey, about the year 1800, some sixty years ago. About the same time, Daniel Ross also went from New York, and commenced carriage-making in the same city. It is stated that at this period there were but five carriage shops in the city of New York, and these but poor affairs, their highest ambition extending only to the manufacture of chaises with wooden springs, mounted on two wheels. Every carriage of much pretention in this country, had, up to this time, been imported from Europe.

Mr. Campfield, with true American ambition, aimed to have his work well made, and how far he succeeded is well known to the older carriage-makers, for his reputation for good work ever stood high. In fact, he was so tenacious of his reputation that he would not let a bad job go out of his shop, even at the loss of the entire outlay in building. Such was his vigilance in maintaining his

character for good work, that the expression "it won't do at all," was often followed by a sledge through the panel of a job. This, although it heightened his reputation, lowered his receipts, and it is stated that his profits from coach-making were never very great.

Mr. Campfield is now an old man—over ninety years—and is the oldest practical coach-maker living. He has been many years retired from the business, the rise of property in Newark having placed him in comfortable circumstances, where, surrounded by family and friends, he awaits the hour when the Master shall call him to the reward of a well-spent life.

Home Circle.

For the New York Coach-maker's Magazine.

THE PASSING SHIP.

BY MRS. L. H. SIGOURNEY.

White sail, o'er the billows speeding,
Hid'st thou in thy secret breast,
Hearts, the gain of lucre heeding
Without rival, without rest?

Hearts, some secret burden bearing,
That no sympathy can reach?
Hearts, for others' welfare caring,
Prompt in deed, and kind in speech?

Hearts, to pure affection wedded,
Such as Home's sweet empire deck,
Like the stainless pearl-drops threaded
Round young Beauty's polish'd neck?

Hearts, with admiration glowing,
Of fair Nature's glorious show?
Hearts, no purer gladness knowing
Than His love, who made her so?

Speed thee on, with bird-like motion,
Guard thy freight without a fear,
Wanderer o'er the trackless ocean,
Toward thy port unerring steer.

For the New York Coach-maker's Magazine.

MY DREAM.

BY ANNIE M. BEACH.

I dreamed last night of roses,
Of roses in their bloom;
And I know not if the omen be
Of gladness, or of gloom.

All rich in dewy fragrance,
They graced a slender vine;
And I formed them in a sweet bouquet
For a cherished friend of mine.

But as I bound the chaplet,
They faded fast away,
And the rich, red rose-leaves scattered
On the ground in beauty lay.

Oh, tell me if the omen be
Of gladness or of gloom;
Why should I dream of roses thus,
To wither in their bloom?

Cambria, N. Y., Sept. 1860.

If you fall into misfortune, disengage yourself as well as you can. Creep through bushes with the fewest briers.

For the New York Coach-maker's Magazine.

KITTIE LEIGH'S LETTERS FROM ELM FARM.

BY ANNIE M. BEACH.

Elm Farm, May 20th, ——.

Dear Jennie,—Not three days have elapsed since I "here arrived," and am I not fulfilling the promise I made? Am I not writing soon? And now *what shall I write* that will interest you? You know all about the hurry of commencing a journey, how many calls one must make before starting, and how many promises are made (without the slightest notion of keeping them) to write soon, and tell all about "the country," which some city people seem to think quite horrid. I found uncle Clayton and cousin Lizzie (or Elizabeth, as uncle, aunt, and grandmother, call her) had been in town some hours, waiting for me. I was truly glad to see them, and receive the warm welcome they gave me. I am sure they were disappointed in my appearance, for cousin Lizzie has since told me she almost dreaded the meeting, as she expected to find me quite formal. A pleasant drive of six miles brought us to Elm Farm. The old clock was just striking four as we arrived. Aunt Clayton met us at the gate, and made me feel very welcome. "My dear *Catharine*," said she, "how glad we all are to see you." Grandmother met us at the door. Dear old lady! You know her, Jennie, how much I always thought of her. She is now over seventy, but, having good health, still looks quite young. Next came the introduction to cousins Agnes and Alice, Lizzie's twin sisters. They are fourteen years old, and really very handsome. Very like they are, so much so that, even now, when seeing one alone, I cannot tell whether it be Aggie or Allie—soft, brown curls; deep, blue eyes; and very rosy cheeks; and, with all, such sweet, winning smiles. I am sure they will be my pets. How nice and pleasant everything looked! How many questions were asked and answered! and, finally, after the excitement of greeting was over, cousin Lizzzie very kindly invited me to her room to wash and prepare for tea. "It's the very room that used to be your mother's before she got married," said grandmother, "and the pictures that hang up in it are some of her work. 'Lizabeth thinks a terrible sight of 'em, and they are pretty." Dear grandmother! how kind she always is. You know, Jennie, she is not my own grandmother; she is my mother's step-mother, yet no less dear for that, as she has always been a true, whole-souled woman. Uncle Clayton is my mother's half-brother, four years younger than she, but looking that much older. And thus I was left alone in the room, which, long, long years before, had been my mother's. I finished my toilet, and sat down by the low window. In came the fragrant breath of flowers from the garden below; I heard the busy humming of the bees, and the song of the cheerful robin; and, Jennie dear, I was not sorry I had come. Would you have been? Presently cousin Lizzie entered. "Are you *very* tired, cousin?" she said; "we shall be so happy if we can keep you from being homesick for a few months; I am sure we shall have fine times." "Girls!" called uncle Clayton, from the stair-door, "come down now, supper's all ready." So down we went to *supper*. We were all seated at the table. All expressed their hope that I might not be homesick, and also that I might be able to find "something I could eat." I assured them I should feel perfectly at

home. Grandmother was the first to break the momentary silence. "Caroline" (my aunt's name), "where's Benjamin? he han't seen cousin Catharine yet." "Never mind him now, grandma," said aunt; "he's so bashful,—just as boys always are at twelve," she said, turning to me. "Is there a cousin I have not yet seen?" said I. "Ben!" called grandmother, "come, see your cousin, and eat your supper." A mischievous-looking boy peeped in at the open door, then dodged back. "Never mind him now," said Lizzie, "he won't come." "Oh, yes, he will!" said grandmother, "he's only dreadful bashful." Ben looked in again at the open door. This time uncle saw him. "Come, come," said he, "Ben, don't act so; be a gentleman, and sit down to supper; you make your sisters ashamed of you." In came Ben, looking much more roguish than bashful. "Good evening, cousin Ben," I said; "surely, you're not afraid of me; I think we shall be great friends yet; don't you?" "Yes, ma'am," said Ben, looking at Lizzie instead of me, and taking the vacant seat beside grandmether. "Grandma's boy," said that lady, pushing back his thick hair, and thereby displaying a really handsome forehead. Tea passed off very pleasantly. Uncle talked to me of the farm, horses, cows, sheep, hens, and bees, and asked many questions about father and mother. He says he wonders if mother has forgotten how to milk; he means she shall try it when she comes. Tea being over, I was invited into the *front room*. Really, Jennie, the neatest, prettiest little parlor I have seen this many a day. I wonder how a description would look on paper. The carpet, decidedly pretty; the dimity curtains, decidedly white; a vase of flowers in each window; a table, with books, ambrotypes, and toys; and a really fine melodeon—these are the principal attractions. Grandmother excused herself to look after Ben, and Lizzie and I were left to ourselves. We became quite social after a little, talking of the flowers, birds, and everything else we could think of. I did not ask Lizzie to play, fearing she might, in turn, invite me, and you know well I am not a natural musician. Ere long we were joined by the rest of the family, Ben not excepted, and an hour glided pleasantly away; then good nights were said, and Lizzie and I retired to her quiet room. "Wake me early, Lizzie," I said, just as we were dropping to sleep. I do not think she said yes, for when I woke next morning the sun was shining in at the open window, and Lizzie was gone. I glanced at my watch, and, oh, Jennie! imagine my vexation when I found it to be after eight o'clock. I can assure you no very long time was spent in dressing, and down I went. I found everything in fine order. Aunt was churning; grandmother knitting for Ben; Lizzie trimming grandmother's cap; and Aggie, Allie, and Ben just starting for school. At sight of me Ben ran; his sisters apologized, gracefully received my good-morning kiss, and left. I turned to excuse myself for rising so late. "Don't say a word," said aunt; grandma and I told the girls not to wake you,—let you have your sleep out. Your breakfast's ready any time, and Elizabeth will sit down with you." So Lizzie and I sat down to breakfast, chatting with aunt and grandmother, and forming plans for the coming day. At noon I begged hard to go with uncle into the field, and see the men work; he would have taken Lizzie and me, but aunt would not let me go. "You don't consider, Richard," she said, "she ain't as tough as our children." However, she did consent to let us ride part way down the lane. Uncle says I may go clear down next week. "You'll go to Sabbath-school with us to-morrow morning, won't you?" said Lizzie, as we sat alone at evening. "So early?" I said, and was about to say, "Won't you excuse me this once?" when, looking up, I saw such a shade of disappointment on her pretty face, that I quickly answered, "Oh, yes, cousin, if you wish me to." "That's a good, *good* girl, or lady," said Lizzie playfully; and, stooping, she imprinted a cousinly kiss upon my cheek, which made me truly glad I had said yes. You may be sure I was aroused early on Sabbath morning. How calm, and fresh, and cool, everything looked. Breakfast over, and the table cleared away, we commenced preparations for church (or rather for Sabbath school, which comes first), and at just ten minutes before nine we were ready to start. Ben was, by this time, quite social, telling me the names of different neighbors, whose residences we passed, and how many acres such and such farms contained. Lizzie teaches a class of five girls. And now, Jennie, let me say, I learned some things while listening to her, which I believe I never knew before. The school is quite large, and in good order; and the scholars sing very sweetly. Uncle, aunt, and grandmother arrived just as school closed, and I was comfortably seated in their pew. Lizzie sings in the choir; she says I shall sing next Sabbath. I *wonder* if I will. After church, Lizzie introduced me to several of her young lady friends; also to Mrs. Mason, the minister's wife, and Miss Osburn, the teacher of the select school. "What a handsome gentleman your Sabbath-school librarian is!" I said to Lizzie, as we sat in the parlor after dinner. "Yes," said Lizzie, "He's pretty good-looking." Here Ben broke in, "He's Lizzie's beau, too, and you'll see him here to-night." "No, Ben," said Lizzie, very decidedly, her cheeks now a beautiful color. "But she will, too," returned Ben, with warmth, "this is the night he comes; he wasn't here last Sunday, and"—"Ben, shall I tell father?" said Lizzie. "Mother, make Ben stop." Ben's face was now of a broad grin. "Benjamin," cried grandmother, coming to the door, "what is the matter?" "Nothing, grandma," said Ben, "only Lizzie says Frank Ashley ain't coming here to-night, and I say he is, too, for"—Before he had finished, grandmother had him in her grasp, and with a push sent him from the room. "There, now, go read your Sunday-school book, and don't bother the girls." Then, glancing back with a knowing look and good-natured smile, she said, "Maybe he isn't much mistaken after all." But Mr. Ashley did not make his appearance. I think, however, in my next I may tell you something of him, as Lizzie tells me he will call to-morrow evening. And now, Jennie, dear, what a long letter I have written. Hav'nt I told you everything, just as I promised? and don't you think I am going to have a good time? Remember me kindly to all who may inquire, and think of me ever as your true, loving friend,

KITTIE LEIGH.

[Readers of the "Home Circle" will be pleased to find that we are able again to restore it to our pages, having been obliged to leave it out for two months, to give accumulated mechanical matter. This fact will account for the "*age*" of Kittie's letters. In perusing them, the reader has only—if he can—to imagine that the fields without are yet green, and, as he sits by his anthracite fire, enjoying his *otium cum dignitate*, they will read just as pleasantly as though published in June.—ED.]

For the New York Coach-maker's Magazine.

THE AUTOBIOGRAPHY OF CALEB SNUG, OF SNUGTOWN, CARRIAGE-MAKER.

CHAPTER X.

Coach-making thirty years ago—Tricks with the tyros at the trade—Machinery in carriage-making—Caleb hangs out his shingle in Snugtown—The author moralizes—Carriage-making not as profitable as some suppose—A boss's trials and perplexities illustrated.

At the period referred to in the last chapter, New Haven did not contain half as many carriage-shops as it does now. In fact, carriage-making in America scarcely went beyond anything more difficult to produce than chaises, chariotees, Stanhopes, and Tilburies. A coach was occasionally built, but the men to build them were difficult to be found, and when found, looked upon as extraordinary mechanics; such obtained the highest rate of wages, and could find steady employment.

This being the first of my residing in a city, novelties were presented to my mind, which none but such as have been transferred from rural to city life can realize. Even among coach-makers there were some *tricks* to be exercised upon "green-horns." Some of these I was already "posted" in, and some I had yet to learn. By some freak of good fortune, however, I steered clear of the practical experiments of my shopmates in their tricks upon me personally, but which was not owing so much to indifference on their part, as to the exercise of caution on mine. Preliminary to commencing work every *new jour.* must pay his "footing," and no one could expect to have any peace until he did so. There were then, and even now are, some who would much rather lose half a day's time, than their toddy! Poor fellows, these are journeymen all their life-time, but, *their* lifetime is short.

Among the tricks referred to previously, may be mentioned the now somewhat stale one of sending the "green-horn" to some person, generally in the smith-shop, for a little *strap-oil.* Of course the messenger sent upon such errands *got it*—upon the back!—except in cases where the *seller's* pity for the dupe overbalanced his proclivity for fun, which, to the honor of poor human nature be it said, in some instances has been the case. Another trick—and this one may with some propriety be excused—was well calculated for warning the new beginner against the habit of leaving the job upon which he might be at work still grappled in his vise, on leaving his work-bench. He might be considered a lucky wight, who, on returning to his work, did not find, on handling his job, that a sticking-plaster had been applied to the under side in his absence, taken from the kettle of axle-grease, in those days when wooden axles were in common use. The like attention would also be paid to a saw left carelessly sticking in the saw-calf of a plank. I confess that I, myself, early received an *impressive* lesson in this very school, such as I shall remember as long as I work at coach-making. The carelessness of pupils, and indeed some old graduates, in this particular, might *receive* a lesson in this way, with good effect. To leave a vise all night straining with a stick of wood between its jaws, has no beneficial result about it, to recommend the practice. Again—and this I always thought a little too boyish—another practice was, to fasten the lid of the tool-chest of a leaving journeyman down with brads, so carefully as to conceal the act, until he should endeavor to open it at his next engagement, when he would be sure to discover the trick; but the difficulty in such cases was in finding out who was the trickster. Numerous other examples might be presented, but these will serve to show the "tricks of trade" in former days.

There was one thing in coach-making thirty years ago that may be appropriately considered in this connection—that is, the effects of machinery on the wages of operatives. It has been asserted that the tendency of machinery in the production of carriages is to lower wages, and to lessen the demand for hand-labor. Let us see if such be the fact. A good workman could be had in 1830 for $1.25 per day, and a set of carriage-wheels could be hired made by the piece for about $5; and then, except the turned hub, every thing had to be got out of the rough and framed by hand. Now, no one would think of taking less than $1.50 a day, and some command higher wages than that. For wheels,—spokes dressed and rims bent to hand,—$4 must be paid. The increasing demand for carriages in this country, appears to keep pace with new appliances of machinery, and thus good workmen can find sufficient employment at remunerative wages, relieved of the harder drudgery imposed upon the coach-maker in preparing the material used in carriage-building in its incipient days.

Infatuated with the idea of becoming boss, and dreaming of a fortune that I was soon to make, having already grown tired in my three years' experience at journeyman-labor, I now began to entertain a serious thought of setting-up business on my own account. Revolving the question in my own mind, as to the advantages offered by various localities to a coach-maker, I finally fixed upon Snugtown as *the* place for me. Several circumstances led to this conclusion. One was, that it was my native town. Another, that although it had been once a town, like many other places in this *fast* age, in America, it was fast assuming the character of a populous city, and the "signs of the times" were, that at no distant day there would arise a class of *fast* men, who must have their *fast* "Lady Suffolks," and then the probabilities were that Caleb would make money *fast.* The Sawgetup firm had already been voted "old fogies," and Snugtown, in fact, being without the blessings dispensed by a live carriage-maker, called loudly on some one of the craft to "hang out his shingle" there. The Windup, and now Main street corner, alluded to in Chapter V. of this narrative, could not be had for my location, as a "squatter" had already appropriated it; so I had, like the Irishman, to "do as well as I could," in seeking a place for my shop elsewhere. I finally secured a lot near the corner bounded by Shawmut and Crab-apple streets, on which I erected a three-story "brick."

Probably there will be found no period in a man's history when he *dreams* so pleasantly as at the time when he first commences the great struggle of life for himself. The youthful man sets out with the pleasing idea that attention to business will soon bring to his hands a store-house of wealth. Looking only on the sunny side of the picture, regardless of the darker shades, his mind revels in utopian hopes, that he will soon secure a competence for all after life. Happy is he who finds the one half of his dreaming realized. "Hope told a pleasing tale," *and I believed her.* I dreamed that once in business, I would soon make a fortune, and yet I find that after thirty years' toil the fortune is still beyond *my* grasp.

I find that most people—outsiders—suppose that car-

riage-making is a profitable business; but those who have tried it and are the best qualified to judge on this subject, entertain a different opinion,—that for the amount of capital invested, there are few enterprises that pay so small a profit. This is owing in a great measure to the fact that there are many manufacturers, who, in their strife to undersell a neighbor, actually dispose of their work for cost, and not unfrequently for even less than it costs them to build. Should any of my readers be so unfortunate as to come in contact with these "adventurers," you will do well to *kill* them with kindnesses,—send them all the customers you know of, who want their work done on the cheap plan, and burst them up as soon as possible.

I had not long been in business before I discovered that boss coach-maker's had their troubles as well as other mechanics. While a journeyman, when a day's work was over, my mind was freed from care and business. Not so now. When released from the shop at 6 P. M., I must run after A, B, and C, to receive in promises that which should have been paid in something more tangible, or perhaps something still less satisfactory—an invitation to "call again next week,"—without even the promise-to-pay encouragement; and when *that* week rolled around, Mr. A had been disappointed in his expectations of receiving the money due him from B; but "if I would *only* wait until the 4th of next month, I would be pretty sure of getting my pay." On the day fixed, I call and find that Mr. A has mislaid the bill rendered on my first visit, so I am obliged on some evening to make out another, and when this is presented, am put off with the complaint that some of its items are charged too high, or that, *that* tire wore out too soon, or some other *reasonable* excuse, that keeps me running three or four months before my claims are settled, and then I am fortunate should he not cut my account down fully one-fourth of the amount before he is disposed to pay up.

ADVANTAGES IN USE OF CYLINDRICAL OVER CONICAL WHEELS.

IN dealing with the two forms of wheels most commonly in use, namely the conical, and cylindrical, we shall endeavor to describe the peculiarities of each, their advantages and disadvantages, so as to afford our readers an opportunity of judging of their merits, and deciding which, under certain circumstances, would be the better suited to their purpose.

The wheel which has been in general use for many years is commonly called the beveled or conical wheel. Long ago, when roads were deplorably bad, and carts and wagons were deficient in width, it became a matter of importance to enlarge the bodies of these vehicles; and, in order that the wheels might still follow their old tracks, the axles were tilted down at the ends, so as to bring the lower edges of the wheels closer together. It being also necessary to preserve a flat surface to rest upon the roadway, the peripheries had to be coned, which caused their outside circumference to be of less diameter than those nearer the wagon.

With the innate feeling that seems to exist in the human mind to follow in the steps of those who have preceded us, this form of wheel has been handed down from generation to generation, and our forefathers seem to have been perfectly content with what they found already arranged for them. It is, however, a well-known property of the cone, that in the course of its revolutions it describes a circle upon the ground, the radius of which is equal to the line drawn from its apex to its base. When the cone is truncated it still has a like tendency; the reason of this is obvious: it is merely a case of proportion between the diameter of the various lines of circumference, and the distance over which they respectively pass in making a certain number of revolutions. Now, it is evident from this fact, that whenever we cause a coned wheel to move in a straight line, we must overcome this natural tendency, and in doing so produce a great amount of unnecessary friction, which absorbs power and has a tendency to grind away the tire, and to pulverize the road on which the body moves. Let us take a case in point. The small wheels of wagons on this principle are sometimes coned to such an extent that the inside line of circumference passes over four feet of surface, while the outside passes theoretically over only three; therefore, there is a dragging motion of one foot in every four over which the body travels. It is needless to say that this absorbs a great amount of power, and adds much to the draught of the carriage. Again, the tendency of coned wheels to move in a circle produces an undue strain on the axle, and a constant friction upon the linch-pin. Added to this, in certain cases in which the line of the center of gravity falls within the bearings of the axles (which often happens in wheels of this sort), there is of necessity an extra amount of friction produced by the effect of a pressure applied to the upper and outside, and lower and inside surface of the bearings or bushes in question. It was also found that the tilting of the axle and the beveling of the rims of the wheels caused the center line of gravity to leave the spokes, so that it became necessary to insert them obliquely into the nave, and this was found greatly to add to their strength and durability, when not carried to excess, as dishing the spokes gives to the wheels somewhat of the properties of an arch.

The cylindrical wheel has the whole of its circumference of equal diameter, and this secures to it an equal velocity through the breadth of its periphery. This being the case, it is evident that no power is lost by undue friction on any part, but that the motion is allowed to continue in an uniform manner. The best form of broad wheel, in our opinion, is that in which the spokes are set into the nave a little on the dish, and, with a rim six inches wide, should be beveled to the front edge one eighth of an inch only. To this extent it is of advantage; and a wheel made in this way is better able to bear its load and resist side pressure from the uneven surface of the road. When this becomes generally known, there is but little doubt that wheels with broad rims and thin, steel tires will be fully appreciated and extensively adopted for heavy traffic on common roads. The saving that would be effected in repairs of wheels, as well as of roads, would be immense, and animal power greatly economized.

Viewing these considerations, the thoughtful mind will without difficulty be able to decide which form of wheel is in theory the more correct, or in practice the more useful.

Prejudice is not overwhelming in these days. Men are unwilling now, we are happy to say, to continue to adopt that which will not bear scientific investigation.—*Carriage-Builders' Art Journal.*

Pen Illustrations of the Drafts.

SKIDDY ROCKAWAY.

Illustrated on Plate XIX.

Among the great variety of carriages called Rockaways in favor this season, none have been more popular than the kind we here present, from the pencil of Mr. Isaac W. Britton, one of the artists of this Magazine. The name, Skiddy, is complimentary to a broker of New-York city, for whom it was originally designed. It makes a comfortable, and, at the same time, a very light vehicle for six passengers, which are sufficient qualifications to recommend it to an American.

We shall not go into working details, believing that, to a competent body-maker, it is altogether unnecessary. The portion we have tinted above the belt, is designed to show that part of the body to be filled in with patent leather, instead of panel. The wheels being lower than usual with American carriages, as may be observed, makes it necessary to elevate the front of the futchells, for the reception of the pole, as seen in our draft.

For the New York Coach-maker's Magazine.

WHITTIER ROCKAWAY.

Illustrated on Plate XX.

Haverhill, Mass., Sept. 8, 1860.

Mr. Editor—*Dear Sir*, Enclosed you will find the draft for a light Rockaway, as built by Mr. Alvah Whittier, of this town. It is something exceedingly nice, and reflects much credit on its designer. This is only one of the many different styles that are manufactured at this establishment, and which are justly celebrated for their beauty of design and elegance in finish, in the Boston market.

In building the body, put considerable swell on the standing-pillars, so as to give sufficient flare on the seats. The back, with round corners to conform with the seat, may be either left open for a curtain, or paneled up with a fancy window, according to taste. The front seat is arranged so that it may be thrown forward, for the convenience of getting into the carriage. Mr. Whittier has his work trimmed very tasty, and with an eye to comfort, which should be the chief object in all pleasure-carriages.

Yours, truly, J. R. B.

[We can endorse all our correspondent says in regard to Mr. Whittier's claim as an ingenious mechanic, having had, in our late visit to the place, an opportunity of seeing for ourselves, but which, in studying brevity, we failed to notice in our August number in the proper place. We hope to hear again from our contributor.—Ed.]

CRADLE-SPRING BUGGY.

Illustrated on Plate XXI.

Long-spring buggies having become quite an "institution" in some portions of our extensive Republic, we have been induced to try our hand at designing; and the buggy here alluded to is the result. Much of the novelty will be found in the formation of the back and crest pannels, which, like our Rockaway, are inlaid with imitations of wicker-work. There are three perches designed for this buggy, the outer ones of which, *a la* Concord, support the goose-necks, or C-springs, as the case may be, for the side-springs.

Sparks from the Anvil.

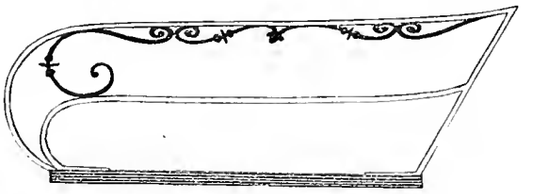
IMPROVEMENT IN HANGING-UP IRONS.

Almost any job with side doors is liable to sag in the center, rendering it nearly impossible to open or shut the same after a little while in use. Various modes of construction have been adopted to provide against such casualties with more or less success. None of them, however, will

prove as efficient as when the bottom-plate is made in two halves, and bent at angles at the ends, as seen in our diagram. The bolt at this place should be made from the very best iron, with a strong head, since considerable strain will be brought upon it in operation. Should the difficulty complained of in deep-cut doors take place, by turning the nut on the bolt it will be relieved immediately, and remove the strain at the door-pillars.

FANCY SEAT-RAIL.

Seat-rails, as usually made, are plain affairs, but may be improved by adopting some such a design as we present. For fancy work, designed for a Southern market,



when plated, our design will add greatly to the value of the carriage. Care should be taken in securing the fancy to the outer rail, to have it stand in a perpendicular line, otherwise it might prove a source of trouble to some nervous driver, by catching his dress.

DESIGN FOR A BUGGY SEAT-WING.

In this diagram, A represents the handle formed by turning down the front end. The other part is designed

for being covered with leather in the usual way. This is not only a simple design, but makes a good finish, with the handle plated.

For the New York Coach-maker's Magazine.

EFFECTS OF TITANIUM IN IRON AND STEEL.

MR. EDITOR:—I notice in a European publication of recent date, that a new discovery has been made of the influence of titanium on the qualities of iron and steel, which may prove of some interest to your readers. Mr. Mushet, a distinguished practical metallurgist, has discovered, that other things being equal, the goodness of metal depends upon the amount of titanium it contains. He contends that the excellent qualities of the Dannemora iron, for which Sweden is famous, are due to the fact that they contain from one-fourth to one and a half per cent. of titanium. Titanium exists in a greater or less degree in all ores from which iron is obtained; but the steel from which the famous Damascus blades are made, known as *wootz* steel, is known to be obtained from ores possessing titanium in large quantities.

From actual experiment in mixing *rutile* and *ilmenite* with small portions of the ore of titanium, Mr. Mushet has produced an alloy of surpassing excellence. He tells us that up to a certain point, titanium increases the durability of both iron and steel in a remarkable degree. Even gray cast-iron, he assures us, alloyed with a certain portion of titanium and cast into ingots, may be afterwards wrought into bars of great strength and toughness. From a lump of cast-iron three inches square, one experimenter has been enabled to produce bars of iron three-quarters of an inch square, of surprising strength.

This discovery must prove of great value to the world, should it effect all its experimenter claims for it; but, in the present state of affairs, the ores of titanium are so rare, that he could only obtain them in small quantities, at high prices. For this, however, demand will no doubt provide a remedy.

There is no department of the mechanical Arts, that requires a more superior quality of iron than coach-making, especially in a country like ours, where the public asks for less iron, and great strength in their light carriages. In view of the great promises of improvement in the manufacture of iron and steel, both in America and Europe, I, as one of the craft engaged in the smith's department, feel to rejoice, while I subscribe myself as belonging to the family of VULCAN.

PENNSYLVANIA IRON.—The productions of anthracite iron made in Pennsylvania in 1859, amounted to 286,332 tons; of charcoal iron, 30,500 tons. The average price for the anthracite was $22 per ton.

TUNGSTEN AND CAST-STEEL in the proportion of an alloy of 2 and 5 per cent., is said to produce a metal superior to steel for tools, retaining their edge four times the length of those when made from the ordinary steel.

Paint Room.

For the New York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Continued from Page* 93.)

EVERY owner of a carriage ought to exercise his own judgment about having striping upon it. To some tastes it looks well, no matter how it is done; to others it never gives satisfaction. To an experienced, practical painter, it looks well when done well, and in proper unison and harmony both in colors and design with the vehicle; but when it is put on indiscriminately, and with all the fancy "didoes" cut up that a man's brain can supply—in fact when it is done "*a la Concord*"—we say keep it off by all means. You confound it so that it is only a mockery of good workmanship. Our job is painted a rich, dark lake, and the black parts being of a perfect and good black, I question whether it would not look as well to leave it so; but in order to fulfil all that we have promised in previous numbers, we shall fine-line our job.

Of the color most suitable, we expect to find conflicting opinions. I believe I have seen it stated in this Magazine (see page 33 of this volume), that white should never be used with lake; but I have often seen lake fine-lined with white, and to my taste it looks well. One part each of best flake-white, drop-lake, and best vermillion, forms a pleasing contrast, and looks tasty. These ingredients may be altered to any extent between white and vermillion, so as to suit the tastes of those interested. Good, clear vermillion is not to be despised, and if that be too firey, venetian red, or lake may be inserted to take it off. Vermillion striping with carmine drawn over it, makes a rich finish, (a dark purple-lake ground, with a quarter of an inch carmine stripe is the color of the private carriages of the English Royal Family,) but we will endeavor to take a medium course, and make our striping color of two parts of best Chinese or English vermillion, and one part drop-lake. This will look more subdued than clear vermilion. We must be careful not to have it dry, shining, as English varnish is apt "to crawl," and so ruin the job. A stripe of about one-eighth of an inch thick will suit our job. Being so large a body, and so heavy in appearance, no striping looks well that is not done well, and a painter should not only suit his own taste, but work in conformity with the design of the job he is engaged upon. A fine lining, untrue, and badly put upon a moulding, spoils the "sweeps," and shows everything to a disadvantage, whether it be body-making trimming, or the coloring and varnishing; but the reader will allow me to surmise that the striping upon *our* body is faultless,—it is put on true in every particular, and there is no part of it that is thicker or thiner than another. The "horns" are likewise done up to our entire satisfaction, and when a workman is satisfied with his own work—if he be not an egotist—it ought to suit every body else, for he himself is more able to judge of its defects than any casual looker-on.

Our body is now ready for varnishing, and presuming that it is at our option what we do next, we shall wash off the roof cleanly, and give it a good flowing coat of varnish, for upon a flat or a round roof with sharp edges, it is hazardous to give a flowing coat and then varnish the quarters immediately afterwards, as the

varnish from the roof will often run over upon the quarters, and so add no beauty to its appearance. When I can make it convenient, I always prefer to varnish the roof the night previous. Our first duty in the morning is to clean our varnish room. If it be very bad, it ought to have been done before; however, we will make it perfectly clean now, and although the weather is not cold, we will take the precaution to have a small fire in the stove (to encourage the delusion that our room is heated with a furnace, or by steam, is more than we dare to do), for we wish our body to have the chill taken off. We will also have the varnish in the room, so that all shall be of an equal temperature. If I were going to varnish this body alone, I should begin as early in the morning as possible; but I think it far preferable for two to be engaged upon a large piece of work. It is injurious and unhealthy for a man to work so long, confined in a close varnish room,—the varnish being so long exposed becoming heavy and unpleasant to work,—so we shall consider that we have help, and soon after noontime we will proceed to wash off the body, previous to which I take out of the turpentine my varnish brushes, twirl out of them as much spirits as I can, and by the time we have done washing the body, what turpentine remained in the brushes has evaporated. We shall depend upon their being clean, but we will varnish the foot-board first, in order to work them into the varnish, after which we varnish each side quarter, and then the back, from which we go to the front, and afterward each side, while my help has varnished the inside of doors, heel-board, toe-board, sunken bottoms, horns, &c., &c. This is my way, but it does not imply that it is a proper one. The right way to proceed upon any piece of carriage-work, is to begin at the left hand and work to the right, until you have gone entirely around it; but I would advise every one to take that way which they deem best, and wishing all things for the best, we shall console ourselves with the idea that we have made a perfect job, and that it is as good and even a little better than work generally will average.

There is no system by which the quantity of varnish laid upon a measured surface can be regulated. Some men will use twice the quantity of varnish that others will, and their work look no better for it; but I have reason to think from personal experience, and observation in others, that a heavy coat of finishing varnish will wear longer than a moderately thin one (this is disputed by some), and for that reason I always lay on as much as possible, and sometimes a little more than what is good for the looks of the job; but being so strongly impressed with the idea of flowing coats, I could not put on a thin finishing coat if paid to do so—such is custom. We have superintended the painting of the iron work, and will warrant it to stand; we have given it two coats of oil lead color, sand-papered it well, and given it one coat more, after which we gave it one coat of best oil-black, and afterwards two coats of black-japan, a slight rubbing, and a flowing coat of varnish. These now look nice and clean, and in order to keep them so, and save our body from being *pounded up*, we will put them upon the body ourselves, for the painter can do it better than any other person, and if they are fitted properly, without making a finger-mark upon the varnish; and now being all ready, the varnish being dry, yet susceptible of a mark from the least pressure, and knowing what the members of the other branches are at handling varnished work, we volunteer to superintend the lowering of our job upon the carriage. By vigilance and care we have accomplished the job without accident; it looks well, and is pronounced by all to be an excellent piece of painting; so we leave it with a cheerful mind, supposing it now to be out of all danger of receiving any harm.

The following day we are informed that it is all ready for our final touches,—ready to be "blacked off,"—which summons we obey with alacrity; but what is our surprise and indignation, on looking upon the work that has cost us many anxious hours—it may be some restless nights. What punishment shall we inflict upon the miserable "green-horns" who have been entrusted to put on the little necessary finishings? If we were called upon to chastise them, it would be hard to tell what we would do; but certainly nothing less than to brand them (behind their backs) with the word "Ignoramus," for men who will perform the operations they have done upon *our* piece of work, and call themselves tradesmen and mechanics, deserve to come under no better classification. The trimmer has put his pastey fingers upon the varnish in several places, his glass frames were too tight, and the painting upon the grooves is all scraped off, and in placing his dickey seat, and in attaching the whip socket, he has left the impression of his vest buttons upon the sides of the boot. In nailing a small piece of carpet upon the folding steps, he has fingered them up, so that they require revarnishing, and has leaned against it with his arm in one place, and his sleeve in another, until his *little operations* alone has destroyed the appearance of the job. The clown that put the handles in the doors we sentence to an indefinite period, pulling turnips and cabbages, for it is plain he never was intended to *handle* a finished coach-body. He has not only left each door covered with finger-marks, but they amount to visible impressions in the varnish, which cannot be effaced until the job is rubbed over and revarnished. From the looks of the back-panel, the same "artist" was employed to put on the loops for the footman-holders, for he has struck a line from corner to corner, which will be fully perceived for months to come. But those beautiful creoles in the smithy deserve more than a *brand* for their performances. They had a few bolts to cut off, and in shoving their long chisels between the spokes and springs, they have in no case withdrawn it without leaving a mark, to say nothing of the misstrikes they have made with their hammers, in some cases burying the hammer's face in varnish and wood. In fitting the lamp-irons to the front panel, they did not fail to make a place twice as large as is necessary.

The reader might infer that these were all that could do us any harm, but not so; the wheels require a little attention. They have been oiled, but require screwing up; so a lazy, babbling wheeler is called for the purpose, who being too lazy to hoist the wheels with a jack, gets both hands under five spokes of each wheel, and turns them by main force to the position he requires, his fingers actually sticking to the varnish, which curls right up. Can any one be surprised at painters declaring that they will never take pains with another piece of work? or can they be blamed for being out of temper, and growing careless about it, when one job after another is thus treated, no matter how well or how badly painted? When, by misfortune the painting of work does not suit an employer, or should there be some little fault which the painter could not forsee—or even if he did, could not

control or avoid, the employer is never backward at pointing it out. But the butchery these men make of the painter's work is all passed unnoticed, often under the impression that it cannot be avoided. This is wrong; it can and may be avoided. There is no occasion for a single finger-mark upon a finished piece of work, if a little more care and judgment was exercised. But even this is not all our job has to suffer from careless and stupid men. The boss, to give the final finish to all, orders the yardman, or it may be a green apprentice boy, to wash off our job. This is a clincher. To wash off a newly finished piece of work requires some taste and carefulness, as much so as the painting did,—the two jobs are synonymous with each other,—but our apprentice boy, or our yardman knows no difference between a doctor's old chaise, and our fifteen hundred dollar coach, and so takes the first sponge and chamois he can lay hold of. He washes and scratches it with the sponge, and slovens it over with a chamois that might be taken for any Bridget's dish-cloth! The result can easily be imagined. The varnish not only looks streaked, dull, and cloudy, but has the addition of a considerable number of scratches, many of them upon the most prominent part of the panels.

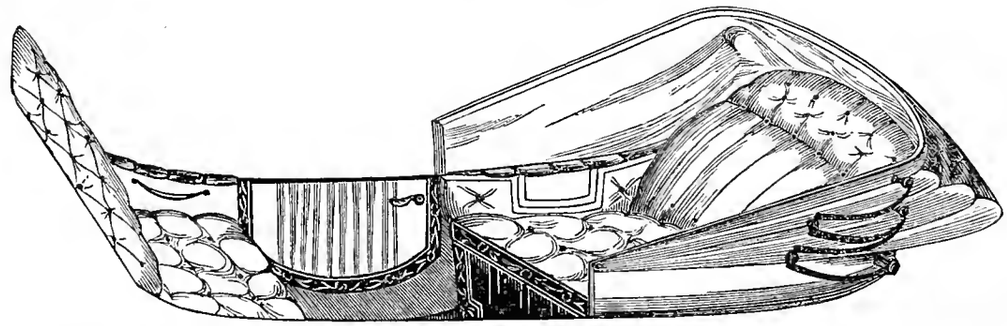
Reader, this may not be so in your factory; if not, allow me to congratulate you in the fact. But if it is so, whatever position you may occupy, you do your endeavors to alter it, both for the sake of the reputation of the work, and also in justice to the painter, for it takes but little to destroy all his past efforts, and to make all the precautions he has taken fruitless.

(*To be continued.*)

Trimming Room.

INSIDE LININGS FOR A BRETT.

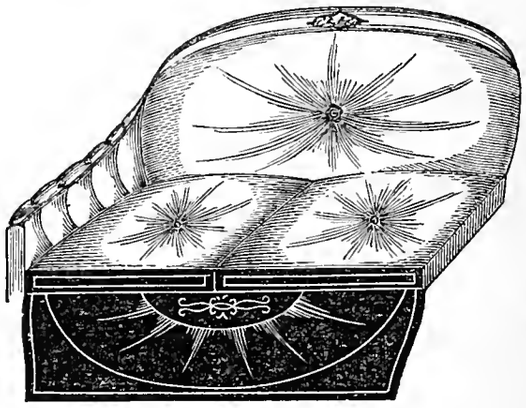
SEVERAL illustrations of detached portions of linings for a Brett have already been given in this Magazine. We now present the whole in one comprehensive view,



showing the arrangement of the different parts. Our choice being for dark lining, we shall select a piece of very fine blue cloth for body-linings, and laces with blue figures on a white silk ground for the fronts of cushions, bottoms of falls, &c. The under-side of the water-deck, turned up in front, should be trimmed in plain diamond-work, a plain, practical style of trimming being more becoming than an elaborate one in this part of a carriage. Slits are shown in the quarters of the side-linings representing pockets, which are very convenient as the receptacle of small articles, to the traveler.

TRIMMINGS FOR A PANELED-SEAT CARRIAGE.

THE back and cushions in this job are in the Oriental style, and quite novel with us. Differing from the linings generally adopted, the cloth in the cushions and back is collected together in folds at centers, with a silver orna-



ment. The fall is composed of two pieces, the bow or inverted arch having plaits therein, formed to match other portions of the trimming. The central figure at the top of the fall, is a flat, half-oval piece of patent leather with a stitched figure in white. This should be firmly secured to the fall by stitching. This style of lining will make a very pretty finish for some description of carriages.

NEW YANKEE NOTION.

IMITATION curled hair is now manufactured for stuffing cushions, mattresses, &c., out of solid blocks of maple, basswood, quaking-asp, or any other sweet-scented inexpensive wood, by our Yankee neighbors, by the aid of a recently-patented machine. The fibrous mass very much resembles white horse-hair, and is represented as being a good substitute for it it many cases, being much cheaper than hair, wool, or cotton, and far better than husks, moss, or sea-grass. The machine for producing this *curled hair* is not expensive, and can be advantageously worked either with steam or water-power, where the *raw material* can be found in plenty.

EXPLANATION OF STITCHING PLATE J.

Nos. 1 and 2 are designs for the center ornaments of boots, in half figures.

No. 3 is designed for the fronts of cushions and the valance, and sides of the tops where curtains take-off or roll-up.

Nos. 4, 5 and 6 represent figures for the corners of dashes and boots.

No. 7 is a figure for a bow-cap.

The New York Coach-Maker's Magazine.

NOVEMBER 1, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

BOUND VOLUMES *of this work are sold, singly, for* $3.50 *per vol., or Vols. I. and II., when purchased together, for* $6.50. *The two volumes, bound (including the subscription for the third year), will be furnished for* $9.50. *The three volumes, in numbers, will be sent for* $8, *when ordered. Single volumes, in numbers, will be sold for* $3, *or any single number for* 25 *cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for* 25 *cts.), can be had at this office for* 44 *cents. When mailed (the postage on which we prepay),* 55 *cents. Any volumes left with us will be bound for* 75 *cents each in our uniform style.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Name-plates furnished to order, of different patterns, for from* $14 *to* $20 *per hundred, at this office, or sent according to directions, by express, payable on delivery; to which express charge must be added. Special attention is called to our* "GENERAL BUSINESS AGENCY," *advertised on another page.*

"A. J. H., of Pa."—The mistake was our own in not putting your name on our book. We have supplied the omission, and hope to find no cause of complaint hereafter.

"J. R. W., of N. Y."—We do not engage to furnish drafts of buggies beyond the publication of those in the Magazine, and the next time you ask us to "shove the Magazine along as soon as possible," you will please "shove along" the *tin* with the order.

"G. C., of O."—You will find the best odometer for practical purposes advertised in this Magazine. The price will be learned by communicating with the Company advertising.

"J. L. J. & Co., N. C."—Of the three wheels you inquire about, we give decided preference to J. D. Sarven's, and when we say this, it is because *we know* it is preferable to any other for lightness and efficiency.

"R. H. B., of Va."—We thank you for "the best wishes of a stranger for our success," and for the kind invitation to visit you when we come to your city.

"S. B., of N. J."—The price of bound volumes purchased singly is $3 50, *not* $3, as incorrectly published in the Oct. No. of the Magazine.

"W. M. McC."—The fact that "the Jours. here have all been *bit* with the *Ohio trap*," is a serious matter, but then they must not suspect every stranger to be a "trapper," who comes well recommended.

A ROYAL VISITOR IN NEW YORK.

LIMITED space in our columns, as a general rule, forbids our entering in detail upon the common occurrences of the day. Notwithstanding this, it is so rare a circumstance to find a live Prince among American sovereigns, that we shall hope to be excused in devoting a page to the history of the event.

Albert Edward (with several other names), Prince of Wales, having made the tour of the B. N. A. Provinces and exhibited himself to his prospective subjects, and subsequently transformed himself into Lord Renfrew on crossing the line which divides "restraint" from the "largest liberty," for the purpose of hunting and other amusements,—after having successively visited the principal cities of the West, made a triumphal entrance into the great metropolis of this Union at 2 P. M. on the 11th of October. The day was in every way favorable to the occasion, which fact combined with the novelty of the visit, served to fill Broadway and its vicinity with the largest crowd of human beings it has ever been our province to witness.

The government steamer, Harriet Lane, having sailed from the city to Perth Amboy in the morning, returned in the afternoon with "the boy," who immediately landed at Castle Garden, amid the noise consequent on the explosion of "villianous saltpetre" and the *vivas* of plebian throats. The Prince and his suite were met at the landing by our indomitable *Lord* Mayor, who always keeps an "*i*" open to passing events, where the following speeches were delivered, and which we present as models for all "long-winded" orators hereafter:—

MAYOR WOOD.—Your Royal Highness: As Chief Magistrate of the City, I welcome you here, and believe that in so doing I represent the entire population, without exception.

THE PRINCE OF WALES.—It affords me a very great pleasure to accept the welcome, and I have no doubt that it will be worthy of the great city of New York.

These formalities disposed of, "our distinguished visitor" hastened to doff his plain citizen's dress, and to don the more fanciful regimentals of a British officer, after which he proceeded to review "our citizen soldiery," drawn up on the Battery to receive him. At this stage of proceedings the Battery and surrounding bay presented a magnificent scene, which in interest has not been equalled since the 25th of November, 1783, when our English *friends*, from this same Battery, so precipitately left us *to shirk* for ourselves. And now came the work for the "stars." Broadway was forbidden way to all kinds of vehicles, other than the Royal cortege, from an early hour, but long before the arrival of the Prince, that aristocratic thoroughfare had become so completely blocked up with plebeian bodies, having curious optics set in the top-pieces, that, in comparison, the labor of cleaning out the Augean stables in ancient times by that old *policeman*, Hercules, was a mere pastime. The manner in which "the stars" *revolved* among the "suns" and "moons" of Gotham, was not the least interesting sight in the day's calendar. It was at one time a question whether the police or the people would prove the victors. Whilst the "stars" are busy with the "sovereigns," we must try and describe the Prince.

The Prince, who is about 19 years old, looks "every inch a *boy*," instead of king, with a sharp, oval face, inclining to fullness about the lower portion, and very delicate or feminine in appearance,—his, as we are told, strongly resembling the countenance of his mother. His head is very narrow, has brown hair, small chin, blue, full, expres-

sive eyes, with more of the supercilious than a kingly look.

Meanwhile, all things being ready, including *that* ten hundred dollar carriage (which, we understand, was purchased of a celebrated Broadway firm for less than seven hundred), the cortege began the march. In the first carriage rode the Prince on the back seat, with our *Lord* Mayor seated at his left hand, in front of whom sat two British red coats. Immediately behind this followed five other carriages, containing the remnant of the Royal party, which included Dukes, Earls, Lords, and Marquises, which "distinguished individuals" have never figured here before, except at our police stations on a charge of riot and breaking the lamp-glasses in Broadway, since the American Revolution. These dignitaries were succeeded by the Aldermen and Councilmen of New York in twelve other carriages. Following the equipages came the citizen soldiery of this locality, comprised in the third Division of N. Y. State Militia—excepting some Irish companies who refused to parade—as follows:—

FIRST BRIGADE.

Brigadier-General Spicer and staff.

Seventy-first Regiment—Light Infantry, Col. Vosburgh; Capt. Miller commanding; 427 men.

Second Regiment—Light Infantry, Col. G. W. B. Tompkins; 320 men.

First Regiment—Cavalry, Lieutenant-Colonel Thomas E. Duff commanding; 350 men.

Third Regiment—Hussars, Col. Postley; 385 men.

SECOND BRIGADE.

Brigadier-General Yates and staff.

Fifth Regiment—Infantry, Col. Christian Schwarzwaelder; 525 men.

Sixth Regiment—Infantry, under command of Col. Joseph C. Pinckney; 325 men.

Fourth Regiment—Artillery, under command of Col. Hincken.

KINGS COUNTY MILITARY.

Fourth Brigade, Third Division, of Kings County, under command of Brigadier-General Crook, consisting of the 13th Regiment, Col. Abel Smith; 14th Regiment, Col. Wood; 28th Regiment, Col. Bennett, and 70th Regiment, Col. Graham. This brigade muster 600 infantry, 200 cavalry, and 200 artillery.

The City Blues of Paterson, Capt. Griffith, were paraded with the 9th Regiment.

THIRD BRIGADE.

Brigadier-General Hall and Staff.

Seventh Regiment (Infantry), Col. Marshal Lefferts, 875 men. The stand of colors recently presented by the City of Washington to the National Guard was carried in the ranks.

Ninth Regiment (Light Infantry), Col. M. Van Buren, 250 men.

Eighth Regiment (Infantry), Col. Geo. Lyon, 450 men.

Fifty-fifth Regiment (Infantry), Col. Le Gal, 450 men.

FOURTH BRIGADE.

Brigadier-General Ewen and Staff.

Eleventh Regiment (Rifles), Col. Homer Bostwick, 480 men.

Tenth Regiment (Infantry), Colonel Halsey, 300 men.

Seventy-ninth Regiment (Infantry), Highland Guards, Colonel McLeay, 350 men.

The cortege reached the City Hall about 4½ o'clock P. M., when the Prince, having taken a position on the front step, "graciously" accorded the military the honors of a passing salute as they marched past him, in review. At a time when the subject of volunteer soldiery is earnestly agitated in England, this part of the ceremony must have greatly interested the Prince. This took up two hours, which, as he he continued standing, must have very much fatigued his Royal legs. This labor ended, the Prince resumed his seat in the carriage, and was driven up Broadway some four miles, through single files of soldiers lining each side of the street, the entire space in the back ground being filled in with a crowd of uncrowned sovereigns the whole distance. On the route we observed, among others, the following "welcome" banners stretched across the street:—

"We honor the Mother, and welcome the Son."

"Welcome to the Prince of Wales."

"England and America: may they always be united."

"Welcome, Victoria's Royal Son."

"God save the Queen."

The Royal carriage having finally reached Twenty-third street after dark, set down its "load" at the private entrance of the Fifth Avenue Hotel, where a fairy vision of a scarlet coat and a nodding white plume of ostrich feathers ended the tableau. How much it will cost to repair the damages done to crinoline and replace the loss of the gentlemen's "tickers" stolen on this memorable occasion, we cannot estimate. Amid the showers of boquets with which "the boy" was greeted by our Yankee "gals," was the following sentimental lines, which may possibly receive a golden frame when he goes back to his mother:—

Accept, dear Prince, this humble gift,
With every kind and loyal prayer.
May Heaven your Highness ever lift
Above each sad and worldly care.
One prayer among the rest I send,
(Maternal love thus make me sing),
Though I would not yourself offend,
May it be long e'er you are king.

The Prince, who studied this *jeu de esprit* with attention, no doubt, was struck with its *originality*. We have but one regret to chronicle, that is,—we could find no opportunity to inquire of the Prince what he had to say about our styles of carriages, and if they were easy riding. His *dictum* might have settled the "war of words" now going on between us and our cotemporary in London. We suggest, with all deference, that the Editor of the Carriage-Builders' Art Journal attend to this matter immediately on the arrival of his future king in England, and let us hear what he thinks of our coaches.

APPEAL FOR MERCY.

SUCH is the suggestive and characteristic caption of an article in the September number of our London cotemporary, assuming to be called "The Carriage Builders' and Harness Makers' Art Journal." Perhaps our readers will pardon us if we continue to bestow a little more attention on so indefatigable an assailant, for the sake of

the main subject involved,—a fair and workmanlike consideration of those relative merits which may characterize British or American carriages, in their general adaptability for the circumstances or markets of each country.

Having already *convicted* those who assail us in that publication of using garbled or wilful misquotations, and adopting wilful perversions of some pervading sentiment in our statements by availing themselves of an accidental but manifest typographical error, we now condescend to any further notice of their continued attacks only from a strict sense of our duty to the grand brotherhood of our honorable craft on both sides of the Atlantic. A *squeal* for mercy may be some relief to our opponents.

In the way of typographical errors, we can well afford to be merciful. A recent instance, during this jug-handle controversy, seems quite sufficient to let us do the magnanimous. We happened to overlook an obviously wrong (when seen) figure in the casual mention of a date, thus enabling our opponent to somewhat apparently ward off the full force of what he must have known was a conclusive argument, while *he* omitted nearly an entire page from one article and gave a double dose of about a similar quantity in two other places! We dislike to break parliamentary rule so much as to be guilty of imputing improper motives; but, really, the usually unfair course of the London publication justifies our present position in this case. Surely our slow-and-sure learned brother deserves to take precedence on the score of typographical errors. We, therefore, readily yield that point, with all its convenient honors, to him.

Even in an "Appeal for Mercy," our London cotemporary is equally (but inconveniently) clumsy. An elephant shows more grace when going down on his knees, especially after having been somewhat civilized in America, or by education imparted from some of our traveling circus companies. Our opponent evidently needs mercy from a Divine degree of liberality and charity, for ordinary human justice might be tempted to blot him out of existence.

Persons lacking veracity or candor are not likely to be much improved by the most favorable contact with civilization. Yet, while always happy to join in every fraternal regard to our English brethren, we hope not to be misunderstood when we find ourselves under the national necessity of administering a little wholesome castigation, occasionally, to an organ which assumes to represent their views and interests. We might well employ the language used by King Henry himself, in Shakespeare's "King Henry V.," after the discovery of treachery against his crown:

> "You must not dare, for shame, to talk of mercy;
> For your own reasons turn into your bosoms,
> As dogs upon their masters, worrying them:—
> See you, my princes, and my noble peers,
> These English monsters!"

We cannot help having an "idea" that our English coach-making cousins are not properly represented without veracity and candor in a high degree of business straightforwardness. Consequently, we can not help expressing our disappointment after witnessing the continued tyrannical tone of "The Carriage Builders' Art Journal," etc. We find ourselves set down as very rebellious boys—and our published statements shamefully distorted—for presuming to say that we can suit purchasers of carriages in this or other markets. Our London opponent construes this plain assertion as a presumptuous rivalry, and yet seems much frightened at the actual proximity of competition in the carriage market of the world, notwithstanding our geographically apparent distance. Probably—we only say "probably"—some of those parties who "build" carriages in England for exportation may have found out the meaning of Sam Patch's favorite saying, that "some things can be done as well as others." Mind, good Mr. Londoner, we only say "probably," for our country grows so rapidly that we have but little time to spare for boasting. Just look at our advertising pages. We do not "calculate" to let any publication get ahead of us, in our department of literature, and yet it takes all our "smartness" to keep up with the wonderful advance of "genuine" improvement created by American taste in the structure and decoration of carriages.

While this grand development of mechanical art and trade activity is going on, our obtuse opponent over in the November fogs of London (here is a chance for a cloudy simile, in return!) buries his "crane neck" (not his coach of that name!) in the sands of oblivion (here is a chance for some metaphorical perversion!), and tries to "whistle himself through the church-yard" (take care of that allusion!), just by way of "making believe" that he is "not afraid of Yankee improvements any more than the ghosts of old hackney coaches. Our London friend is "not afraid;" not he, indeed! Besides, *he* is so well acquainted with the history of carriage making that he forgets the fact of our English shopmates having formerly had to go through precisely the same routine of "pursuing knowledge under difficulties," as we have had to experience. Let not any American reader imagine that our London brother is "afraid;" he is blessed with too much self-complacency to be affected by anything in the "fear" line. He feels quite certain that London came right down from heaven precisely as it now is, with the exception of such few changes as his perverted eyes could not possibly avoid seeing. What need such a philosopher care about history? Were not the thirteen original States of the American Union formerly English colonies, in which not a shoe, a hat, or a brick (to say nothing about carriages), could be manufactured, except by some especial act of parliament? Well, then; go to! That is

as much as our London philosopher *wants* to know, and he is too loyal a subject to attempt learning "any more than the law allows."

The world has begun to find out what the American people have been doing for the last eighty years or so; but our London friend belongs to that peculiar class of blind people who would rather *not* see. He buries his sublimated head, on the ostrich principle (beware of that kind of retirement when Yankees are about!) and endeavors to make himself and his readers believe that this country has not advanced in manufacturing interests since the days when Mr. Charles Dickens played the dickens with our statistics, regulated our domestic institutions, and hashed us up (be very careful how this chopping simile is perverted!) for a "Martin Chuzzlewit" chowder. Now, suppose we grant some foundation of truth for the fanciful sketches made by (the then untraveled) Mr. Dickens, the great difference between our ways of thinking, and those of many English cousins, may be seen in the fact that we not only laugh at but positively patronize our fault-finders—when they happen to have some real talent behind their casual errors. Charles Dickens has more readers in this country than all the readers of all England and those of the European translations added in one grand total. We are willing to learn and let learn, for the same reasons that we are willing to live and let live, all "around the board." Herein consists an essential difference between our "notions" and those of many English cousins; as experience (apart from any egotism) proves that we are not only more willing to make improvements, and to remedy our faults, but we possess a more truthful and ready representation in our class publications,—such as that now in the hands of the reader. If we did not know that our English comrades have more good sense and business candor than such an opponent as "The Carriage Builders' Art Journal," we should certainly hold up our pen, and occupy this space with much more meritorious matter.

These general remarks seem needed before discussing such a dirty affair as the article in the September number of the London publication. From first to last, it contains the same kind of mean prevarications and positively false perversions which we have previously exposed with too much leniency, for such dealings are unworthy of the editorial position; and we begin to suspect that those vile departures from ordinary courtesy and fair argument have been purposely assumed, in order to draw us into a semi-genteel fashion of advertising the aforesaid publication into notice among the American public, as, otherwise, such a slow and scissory concern might never have been known on this side of the Atlantic. If so, we ought to be well paid for our condescension, and we sincerely hope that our readers will pardon the inadvertence of mentioning such trash at all.

Mr. Londoner gets quite jovial on the strength of discovering "coelum" instead of "cœlum," in our use of the well-known quotation, "*Cœlum, non animum mutant, qui trans mare currunt*," while demolishing his friend, who signed himself "A Branch of the British Oak," when he came forward to help "Mr. Editor" out of the scrape he had got into, by endeavoring to refute the facts of our arguments. Without attempting to show in what way the aptness or application of our quotation was at all defective, he becomes quite jubilant over this discovery of "oe" instead of "œ," in a word that could not be mistaken,—a mere oversight in the proof-reading, like the wrong figure which previously gave the London prevaricator so much pleasure. We somehow fancy that the "branch" (sapling) and his modern Mæcenas felt like going out and taking a hundred drinks (no half-and-half measures), Horatian fashion, upon the strength of this discovery:—

> "Sume Mæcenas, cyathos amici
> Sospitis centum; et vigiles lucernas
> *Profer in lucem*:"

not stopping to finish, as Horace wisely and politely does, with—

> "Procul omnis esto
> Clamor et ira."

Without intending to offer an excuse for not printing *œ* in "*coelum*" in double letter, there would be no difficulty in proving that we were right after all. The use of the double letter is only a "modern innovation," for convenience. Either way it will be considered a dipthong. In a copy of Horace, to which we refer our astute critic, printed at "*Vinariae*," 1821, the title readingt hus: "*Q. Horatii Flacci Opera ad fidem sex Codicum M S P T nondum adhibitorum Bibliothecae Regiae Bambergensis, nec non Schoenborniano-Gaibacensis aeque ac Hellerianae, collata cum optimis editionibus, praecipue illa Caroli Fea, aucta lectionem varietate perpetuaque adnotatione, et scholarum in usum edita a Joachimo Henrico Jaeck, Bibliothecae Regiae Bambergensis Praefecto*," we find the word printed just as we printed it.

We have been thus particular in giving high authority for the use made of the word "coelum," used in our July number, but what excuse has our "learned friend" for misquoting us by using an *a* for *u* in the verb "*currunt*,"—thus, "currant"? Our "fancy" as to the drinking is evidently a fact, judging from the inaccuracies in which he permits his Latin to go to press. We are half inclined to think that he was in so *sour* a mood in regard to our remarks, that he judged the sentence must have some reference to fruit, and so altered it to *currant*, mistaking a verb for a noun. If not, it is another example of great *perfection* in our opponent's education. The simple fact is, that the quotation so aptly applied in our demolisher of that "branch" writer, has been used in the heading of "The Albion," the "Hinglish horgan" in this city, for nearly

half a century; and, being so common-place in itself, the paltry error now so triumphantly pointed out, escaped notice in the process of printing. Our London philosopher caught at it as a drowning man would a kinky straw, in sheer desperation for lack of argument,—decidedly a case for the Royal Humane Society. But, in gratitude to our London corrector (as we hope never to be forgetful of all proper courtesies), we can assure him of the fact, that all the Latin classics, and every kind of Latin school-book, are more correctly printed—and more generally read among the people—in this country, than ever they have yet been in England. Thus it is with books as with carriages, locks, printing presses, city railways, telegraphic instruments, weapons of war, life preservers, photographic materials, and nearly every kind of inventions or manufactures. These *things* are American arguments, and they speak a language to the world not to be garbled or misconstrued by cockney jobbers in "pribbles and prabbles."

This is not boasting, but a mere statement of certain facts which we have to make in order to open the eyes of those blundering Londoners. In taking up the number whence "A Branch of the British Oak" *sprouts* himself, we find that, on the front page of the cover, is the name of the highly respectable firm in New York who are the agents for the London publication in America. Next we find the illustrations, nearly all of which are "no news" to Ameriean readers. Then we recognize some very scissory clippings, some duly credited, but generally not, old acquaintances. After these comes quite a refreshing extract, only a few years old, clipped from an Australian newspaper, and the two first sentences are, "Our road and coach traveling *is* really in a very perfect condition. We owe this entirely to American enterprise, aided no doubt by the large expenditure on roads in the last six or seven years," &c. Next come more scissored articles, dry as sawdust, and such as our printer friends would call "solid digs." After describing the illustrations, we find a single-paragraph article, headed "American Advertising," and the first two sentences read thus: "Our relations on the other side of the Atlantic seem to understand the value of advertising on an extensive scale, much better than ourselves. Some of their carriage builders advertise to an extent never dreamt of in this country, and the result is seen in their extensive shipments of carriages." Oh, oh! "Are you there, old Truepenny?" No danger for the truth. Raising a dust about a typographical error cannot obscure the rising sun of truth. Yes, yes; and notwithstanding the pains taken by our London opponent to misrepresent and mislead his patrons, we are proud to say that well-informed and clear-sighted manufacturers have already found out the value of the NEW YORK COACH-MAKER'S MAGAZINE as a universal medium for advertising. The next articles in that specimen number of the London publication are of the scissory order. A small paragraph, about Sir Marc Isambard Brunel, states that the celebrated engineer first went to America in 1797, and that he built the original Bowery Theater, in New York. True, again. After some local matters and notices of new (in England) patents, "A Branch of the British Oak" has his say on the last page. Now, any reader—English or American—will perceive that the only fresh flowers among all this comparative sawdust, are items connected with America, or the movements of American affairs, all copied without credit from this Magazine. What would our cotemporary be without us to stir him up occasionally? Without us and his scissors, what would he do when the printer wants "more copy?"

Similar general remarks may be fairly applied to the September number of the London publication just received, and now under notice. The first article tells us that, "Without some heraldic insignia emblazoned upon its [what?] panels, a modern English equipage is altogether incomplete." Here we have a laughable example of the ignorant use of the word "its," without an antecedent. How a thing can be "altogether incomplete," is a question for some of those wizards or magicians who can contrive to manufacture a "mysterious disappearance" every evening, or as long as the public please to pay for the exhibition. However, we have no "idea" of undertaking to teach our London opponent and his "branch" a proper use of the English language, for we might attract too much notice from the Society for the Prevention of Cruelty to Animals. Even supposing those piratical scissorizers were to filch—convey, the wise it call—all our coach-making "ideas," we have still "a few more left" of a similar sort, for general purposes, quite enough to "accommodate" our London critics in the "Journal" aforesaid. The "idea" of some equipage being "altogether incomplete" is a very fair accompaniment for argument made up from "swagger and bustle," and reminds us of the logic in the cockney saying that, "A veek vithout a Saturday night vouldn't be no veek at all." The nearest approach, in reason, might be to say that any number of our London cotemporary's publication, without its usual pilferings from our columns, would certainly appear very much, if not "altogether incomplete." In short, we give more original matter in any single number than our contemporary does in a whole volume.

As for our obtuse opponent's forced merriment when he says, "to us it is clear that the time for laughter has arrived, when American carriages are brought on the *tapis*," we can only say that we are quite content to let those laugh who win; for, while our opponent's "swagger and bustle" may mislead a portion of his patrons and countrymen, Americans will never cease to aim at all honorable excellence. We shall strive for the world's patronage, and enough facts have been already realized to

assure us of ultimate success. Let our friend keep on with his manufacture of laughter. Again we yield precedence to him on such points; but he must remember that forced merriment often "comes to grief." If he makes no better progress with laughter than with carriages, he will have to "take his gruel" with a wry face and a bad grace.

The September article of our contemporary blames us for not showing what an Englishman does with his money after selling his English-made carriage, soon after arriving in this country. Well, perhaps this was an omission on our part. The fact is, we are not accustomed to rendering a "bill of particulars" in relation to the ready money in a gentleman's pocket. However, we can say that, as a general rule, our English friends purchase some suitable American carriage as soon as possible. Another general rule soon follows,—the "smartest" dealer that ever was could not sell an English-made carriage to an Englishman (who had once sold his own), at any price. Mark those general rules as certain.

We join with our cotemporary in the "idea" of an exchange of editorial visits between each country. *We* are willing to learn whatever may be worth learning; but, from some experience in such matters at carriage-making, we have an "idea" that we should recognize many of our "lost (or stolen) ideas" while walking the whole length of Long Acre, from St. Martin's Lane to Drury Lane. Our friend talks about "the Broadway." We know no such place in New York. We know Broadway, and can afford to excuse our opponent's implied comparison of it with Long Acre, as the two streets can no more be reasonably compared than a Boston court to an Illinois prairie. We repeat the assertion, previously made by us, that, if our friend were once to see Broadway, in New York, he might be better likely to know what he is trying to talk about.

WHAT IS SAID OF OUR MAGAZINE.

Life Illustrated for Oct. 13th, a capital weekly paper published in New York city, says, on the receipt of our October number: "We do not see how a coach-maker can be without this Magazine, any more than a tailor could dispense with his fashion plates. It is well edited, well illustrated, well printed, and deserves the support of the craft everywhere."

A subscriber in Ohio in ordering this work, adds, that in consequence of hard times, "I have been trying to dispense with it (the Magazine) this year, but find I am like a ship at sea without compass or rudder."

It would be an easy matter to add to the above, but should what we have here given induce some to send us their subscriptions, when they will find an opportunity to judge for themselves, our object will have been accomplished.

EDITORIAL CHIPS AND SHAVINGS.

Coach-makers' Target Excursion.—The Editor of this Magazine tenders his thanks to the Green & Co. Guards, of Newark, N. J., who made their second annual target excursion to New Brunswick on the 6th of October; and also to the members of the Coach-maker's Union Club—employees of Brewster & Co., coach-makers, N. Y. city—who made their first annual excursion to Landman's, Hamilton Park, on the 15th of October, for their kind invitations to us to accompany them on those occasions. We can assure them that nothing but other and more pressing engagements prevented our attendance. We regard these "target excursions" as tending to produce the best results, both physically and socially. *Vive la* coach-makers!

The Fiftieth Anniversary of a Coach-maker's Wedding.—We learn, from the New Haven *Journal and Courier*, that James Brewster, Esq., and his wife (Mary Hequembourg), celebrated the 50th anniversary of their marriage on the evening of the 18th of September:—"At an early hour (seven o'clock) his children, grandchildren, and great grandchildren, between thirty and forty in number, gathered at his house in Elm street. After sometime spent in free and pleasant conversation, an address to the parents by the children, grandchildren, and great-grandchildren, and signed by them all—those too young to write making their mark—was presented by their eldest son, Benjamin Brewster, Esq., of New York, and read, at his request, by their second son, Rev. Joseph Brewster, of New Haven, who closed by calling on the pastor of the family, Rev. Dr. Dutton, to add such remarks as he thought suitable to the occasion."

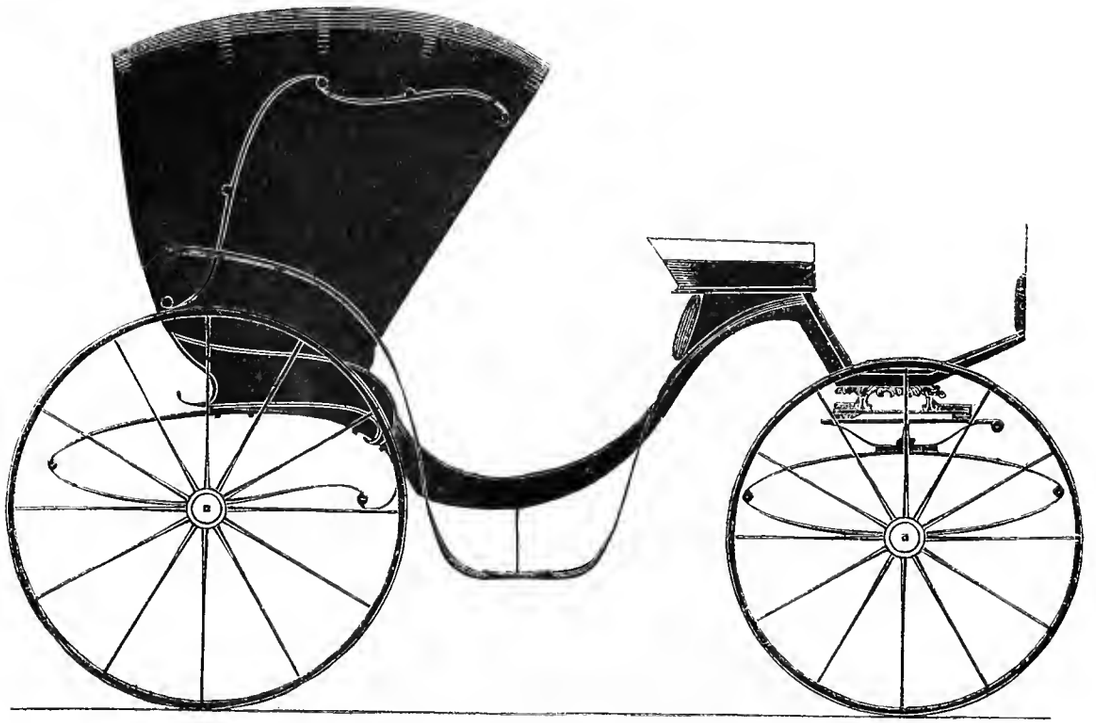
At the close of Mr. Dutton's address, Dr. Holland's Wedding Hymn was sung by the company, and afterwards all repaired to the dining-room, where they partook of the good things provided for them. The portrait and biography of Mr. Brewster, who is now over 72 years of age, was given with the first number of this magazine.

Lessons Gratis, in Drafting.—Our city fellow-coach-makers will rejoice to learn that two wealthy associations have made arrangements for giving lessons this winter, gratis, in Drafting, to applicants who may be over fourteen years of age, at the Cooper Institute, and at the rooms of the Mechanics' Society School, 472 Broadway. The same opportunities for improvement were afforded last season, and were availed of by several hundred persons of different professions, including both journeymen and bosses. To the wood-workman, especially, we would commend these opportunities for profitable exercise during the long winter evenings for acquiring an useful accomplishment for after life.

The press of matter obliges us reluctantly to lay over our usual patents, comic matter, with cut, &c., another month.

MESSRS. BECKHAUS & ALLGAIER'S HEARSE.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 131.

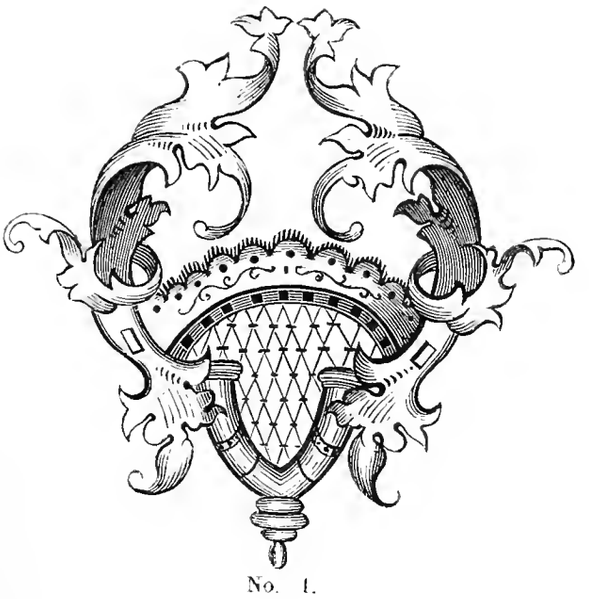


RENFREW PHAETON.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 131.

NEW ENGLAND BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 131.



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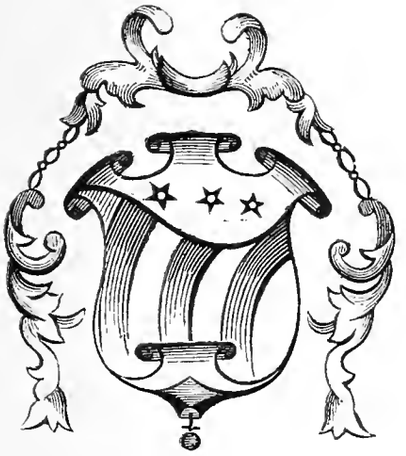


No. 2.

No. 3.

ORIGINAL ORNAMENTAL DESIGNS.

Engraved expressly for the New York Coach-maker's Magazine.

Explained on page 135.

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, DECEMBER, 1860. No. 7.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

V.

Close the door, and draw the curtains over the windows carefully, and then sit down by my side; for I am going to reveal some of my heart-secrets this evening. I feel very serious now,—that kind of seriousness which begets unlimited confidence in all humanity, and causes us to let stranger eyes gaze in upon the sealed records of by-gone years.

You have seen a stream confined within certain limits for a time, but ere long it would break through the banks, sweeping away every obstacle that resisted its wild career; and thus it is with the human heart. You may dam up the great river of social thought, and, for a time, it will flow back in its channel; but soon a freshet of loveliness will swell the turbid current, and then the floodgates will give way, and let the pent-up waters flow through in a hundred different channels. Sometimes you can trace it in confidential letters to warm-hearted friends, sometimes in the records of a private journal, and sometimes in the listening ear of a new-made acquaintance.

We are social beings, and we must have some friend in whom we can place implicit confidence, else our whole lives can be summed up under one general head—misery. It brings relief to the troubled mind, to know that another's sympathies are enlisted in our behalf. When we see persons, no matter of which sex, suffering under some great sorrow, if they keep aloof from society, and brood over their troubles alone, there is one of two places in store for them ere long—the lunatic asylum, or the grave.

There is a period in the history of every man when Destiny unfolds her crumpled chart, and points out the future course of the frail bark we call life. We are now approaching that period in my career, with such feelings as we can imagine takes possession of an inexperienced helmsman on his first voyage, when a low, sullen roar tells him there is a ledge of dangerous breakers just off to the leeward.

Two days only elapsed ere I redeemed my promise by calling on Thalia, and then my visits became more frequent, until finally we were the best of friends.

In truth, the more I saw of her, the better was I pleased. Possessed of an excellent education, with natural talents of a high order, strong intellectual powers, polished by extensive and careful reading, I found her at home on any subject I chose to introduce; and I often presented questions that required acute reasoning, original thought, and ready wit, just to watch the workings of her mind.

But literature of the higher class occupied most of our time, and all the new works in my possession gave me a good excuse to call on her.

On the pleasant October afternoons I would take a seat where the balmy wind, fragrant with the rich perfume of fading flowers, would steal through the open window in a cool, refreshing breeze; and she would sit down near by with her sewing or embroidery, while her mother, occupying her old chair near the fire-place, would listen attentively to my reading for half an hour or so, then fall quietly to sleep. When tired with reading, I would close the book and review what I had perused, or take a walk to see some pet animal, or test the good qualities of some favorite apples.

In the meantime, I became acquainted with several young men in the village, social, good-hearted fellows, and as they had arranged a grand excursion to the river on the first of November, I was invited to make one of the party, accompanied by Thalia. The morning proved a lovely one, and just as the sun was rising we left the village hotel,—thirteen couple of us, all seated in a large express wagon, drawn by four powerful horses. The little town of Nauvoo, rendered famous by its Mormon history, was our destination, and, as the principal part of the way was high, level prairie, with a fine, smooth road, we pressed swiftly onward. All the party were in fine spirits, and the horses flew by on golden wings until we reached Nauvoo, when, after resting and refreshing ourselves at the excellent hotel, we took a stroll over the place, spending several hours in viewing the old Mormon temple, now a crumbling mass of ruins, or in loitering along the "vine-clad hills," and testing the different varieties of grapes

that hung in purple clusters on the trailing vines. The afternoon was drawing towards its close, when Thalia and myself, having wandered from the rest of the company, directed our steps towards the river. It was my first visit to the "Father of Rivers," and I shall never forget my feelings as I stood and gazed down upon the blue waves as they rolled past me, as though in haste to reach the great ocean more than a thousand miles away.

"How pleasant it would be to take a sail!" said my companion, after we had remained looking on the broad stream in silence for several minutes.

"Delightful!" exclaimed I, "let us go."

"If you think there is no danger, I do not know as I have any objection," she said, in a low, confiding tone.

"None whatever," I answered; and procuring a skiff near by, we stepped in it. Seizing the oars, I struck out a few yards from the shore, and then pulled up stream. I had been used to handling oars from my boyhood, and it seemed like old times to me to grasp and dip them gracefully in the liquid element once more. We had proceeded some half a mile when I struck out in the river, and on reaching the channel I turned the skiff down stream, and then let it float slowly with the current.

It was a lovely afternoon,—a link from the golden chain which October weaves to bind the autumnal landscape; and we could scarcely realize that November, the month of cold, stormy days, "the saddest of the year," was with us. It was one of those soft, hazy days in Indian Summer, a season of the year that begets a disposition to sit down and let the mind wander off in delightful reveries,—painting fancy pictures on the canvas of life. The scene by which we were surrounded was well calculated to throw a dreamy stupor over our minds. The smoky atmosphere, peculiar to the season, hung like a gauze curtain over the neighboring forests, while the sunbeams struggled down through it, as though half unwilling to come in contact with the cold earth. Not a breath of air was stirring, and the sparkling water around us presented a smooth, unruffled surface, almost as transparent as a mirror. No noise was heard in the village below, and all was silent, with the exception of an occasional *caw* of a crow that sat on the dead top of a lofty cottonwood just above us.

The forest presented a variety of colors, green, yellow, brown, almost red, and then an odd mixture of all, which would puzzle the most discriminating to name. Now and then a leaf, unable to retain its frail hold longer, would silently drop off its parent tree; and one from a sycamore near by was wafted by an unfelt current of air over the river, where it fell just before us, and was borne down the current like a miniature skiff. We both saw it, and, after it had fallen, I repeated, in a low voice, the beautiful lines of the gifted Wilde:

> My life is like the autumn leaf
> That trembles in the moon's pale ray;
> Its hold is frail, its date is brief,
> Restless, and soon to pass away.
> Yet, ere that leaf shall fall and fade,
> The parent tree will mourn its shade,
> The winds bewail the leafless tree,—
> But none shall breathe a sigh for me!

Again we were silent for a few moments, when Thalia broke it by saying "How beautiful! Do you love rivers as well as you do trees?"

"If anything, better," I answered, "especially rivers that have a world-wide reputation like this. I never approach and gaze on one for the first time without feelings of awe; and, as I look down on these blue waters, memory takes me back to my school-boy days, when the "Father of Rivers" possessed greater charms to my youthful mind than the calm-flowing Rhine, with its castellated banks, the swift Po, with its clear waters sparkling 'neath an Italian sun, or the classic Tiber, on whose banks the Mistress of the World flourished in all her royal splendor, when it was looked upon as the western boundary of civilization; while, in imagination, I could see the red man issue from his rude wigwam and skim its smooth surface in his bark canoe,—when the howl of the wolf and the shriek of the panther echoed through these deep ravines, and the tramp of innumerable Buffaloes shook the earth as they roamed over the virgin prairies. I can remember once,—the very day and hour,—when I left my playmates in the midst of a favorite game to listen to a traveler who was describing the great river of the far West,—how deep and broad it was, with impenetrable forests of tall cottonwood on either bank, bending over and laving their long branches in the passing current, dark and gloomy, yet strangely beautiful. To me that traveler was the greatest of men, and I looked at him with mingled feelings of awe and curiosity, such as we feel when in the presence of earth's greatest ones; and I felt more respect for him then than I would feel for Taylor, or Livingston, if they were to call on me to-day; and from that hour my greatest ambition was to see with my own eyes this wonderful stream.

Again there was a moment's pause, when Thalia pointed down the river and asked, "Do you see the bank yonder, where it recedes so gently, with a natural terrace half way up it?"

I nodded an assent. "I, too, have always felt an admiration for the Mississippi," she continued, "and I often think I would love to live here, and that is the place I would select for my home. Imagine how beautiful it would look with the slope down to the water's edge laid out in circular beds, filled with the rarest flowers and choicest shrubbery, with serpentine walks neatly graveled and lined with sea-shells or box-wood."

"Very pretty, indeed," said I, "but you have left out the most important thing,—a neat cottage-house, built in the Gothic style, with a broad verandah facing the river."

"True," she replied, "I had forgotten that;" and she added, in her gayest tone, "Well, you build the house, and I will oversee it for you," and her light laugh, clear and musical, echoed over the smooth waters.

"It is a bargain," returned I, with a smile; "a home overlooking the 'Father of Rivers' will now be my sole object in the struggle of life."

By this time we had floated down opposite the landing, and, rowing in to the shore, we left the skiff and walked leisurely towards the hotel. We reached it just as supper was announced, and as all the company were present, we entered the long dining-room, where we found the table loaded with the best of viands. It was a merry feast. All the company were in the best of humor, and we passed many a good-natured jest around the board, interspersed with remarks of a graver nature. If a man can ever talk, it is on such an occasion. Conversation becomes contagious, and the sourest cynic feels a ray of social warmth penetrate his heart, and he unconsciously

says something which relieves him, so that he is soon joking and laughing with the merriest.

Finally, it was proposed to have some singing, and, as no one dissented, we considered it adopted unanimously. After a little delay, four of the best singers struck up one of the popular songs of the day, while all the company joined in the chorus.

One of the most distinguished eastern professors of vocal music said, at the close of a musical convention in one of our western towns, that he was surprised at the amount of musical talent there displayed. To one acquainted with the West, however, there is nothing very surprising in the fact. The youth of the West are naturally good singers, which is nothing strange, for they are surrounded from infancy with sights and sounds that will develop their musical talents to the utmost,—deep forests, broad prairies, flowing rivers, countless song-birds,—all inducive to cause the human voice to join the grand Oratorio of Nature.

The company present were fair representatives of the West, and they made those old walls reverberate with melody, as they had never done before. Even the landlady stood by and smiled,—one of those long-drawn, happy smiles, which the student of human nature would interpret "Dreaming we are young again." Ah, yes! despite the deep furrows drawn horizontally across her forehead, despite the silvery hue of her once dark ringlets, she was dreaming of other days, imagining, and almost believing she was

I have [illegible] than on that occasion. It is one of the [illegible] pictures that hangs on the walls of life's galleries.

After an early breakfast the following morning we returned home, all of us well pleased with our excursion. For several days I remained at the hotel in Prairieville, endeavoring to arrive at some definite conclusions regarding a situation for the winter. I confess that for once I was indifferent as to the future. I was willing to sit down supinely and let the problem of destiny solve itself. I was content to be guided by circumstances, without making an effort to shape those circumstances to suit me. I felt as though I should go somewhere, and I would set the time; but ere it arrived, I would postpone it. If I staid, would I not be throwing myself in the influence of a charm more fascinating than the goldfinch feels ere he is encircled in the death-folds of the black-racer? I asked that question seriously, and then I laughingly answered it—"Life has too few pleasant hours for a wanderer like myself, therefore I will improve them while I may." And so my trip to the far West was indefinitely postponed.

During these long reveries I remained in my room very closely, busily putting in the time by reading and writing, and for a week I saw no one outside of the hotel. Then, during the bright moonlit evenings, I would get very lonely,—fits of *ennui* would sweep over my spirits with melancholy force, causing me to walk my room for hours, with a desperation well befitting a maniac. This demon-spirit of loneliness has haunted me from childhood, taking hold of the throne of reason with such force that the pillars which uphold it tremble to their very foundations.

"I must rid myself of this dreaded feeling," said I, "and there is but one resource."

There be times in the life of the most stoical misanthrope that lives when he desires female society, when he longs to associate with the pure and good, and hear words of comfort and consolation from a woman's lips. A woman's voice alone can penetrate within the dungeons of some hearts, and there it will echo through the gloomy corridors like the music of a silver trumpet, until the darkest corners are filled with melody and flooded with the pure light of a brighter world.

It was a dark, chilly afternoon, with a slight mist falling, that I rode out to Mrs. Myrtle's. I found Thalia and her mother engaged at their accustomed work, while Charles was busying himself by looking over an old volume of agricultural papers. After we had talked over the excursion to the river, he laid the periodicals aside and said,—"I am glad you came out, for I have been wanting to see you for several days, and proposed going in town this evening for that purpose. Have you anything special to do this Winter?"

"Nothing fully determined on, as yet," I answered.

"Then you had better come out and teach school for us," he said. "We are sadly in want of a good teacher in this district, and the directors were speaking to me about the probability of engaging you several days ago."

The idea pleased me, and so I accompanied him to see the President of the Board; and in a short time I engaged to teach five months, if all things proved satisfactory. It was further decided that I was to board at Mrs. Myrtle's, as it was nearest the school-house; so I moved my things out there, and had one of the best rooms in the house set apart for my use.

The following Monday I commenced teaching. The attendance was large, and everything passed off smoothly—I had never been more pleasantly situated. The pupils were studious and very dutiful, with two or three exceptions, and those exceptions I soon conquered by kindness and strict discipline. The neighborhood was very pleasant; and almost every evening I had invitations from the children to accompany them home, and pass the night. Sometimes I would accept them; but, generally, I would excuse myself, for the charming society of Thalia was far preferable. On the few pleasant evenings that lingered along in November, we would sometimes take a walk down in the grove and gather hickory-nuts, that grew in abundance along the stream, and sometimes gallop for an hour or so out on the prairie. On Saturdays I would assist Charles in his work, storing away vegetables in the great bins down cellar, or piling the golden corn and wheat in the graneries; and then towards evening ride into town to get our papers and letters from the Post-office. Soon the chilly mornings and evenings warned us that Winter was near at hand; and then the cedar boughs and asparagus were removed, and a cheerful fire blazed on the broad hearth,—the sweetest picture of domestic comfort in the world. When Winter fairly seized his scepter and reigned triumphant, with snow and ice and howling winds, we would draw around the table, and Thalia would sometimes assist me in solving Algebraic problems, or in translating some difficult passage in Cæsar, ready for my next day's labor, for some of my pupils were well advanced. But generally we would pass the long evenings in

reading the treasured thoughts of our favorite authors.

Standard works in prose occupied most of our time, but occasionally we would sip a pure draught from the Castalian fount for variety. Together we followed Philip the Second with jealous interest, from his birth up to the proud day when he was invested with sovereign power by his aged father; to his marriage with proud England's Queen; on through his brilliant campaigns, which stamped him as the most powerful sovereign of the age, we followed him along his adventurous career, as traced by the blind historian,—and we sat down with Goldsmith and Irving, as it were, and perused their charming pages, smooth and polished as the sculptured marble,—and then we read that greatest of modern romances—"Jane Eyre"—a work that will remain an enduring monument to one of earth's humblest children. The *mind* lags along after the heroes of common romance; but the *heart* follows Jane from the hour when she sat in the nursery window, trembling with affright as the hard tones of her boy-persecutor reached her ear, every step of her varied fortunes, until she led her blind husband along the shaded walks of their humble country home.

"Which do you consider the most graphic scene, showing the prominent traits of genius most effectually in its composition?" I asked when we had finished it.

"I can hardly tell," she replied; "but I know what I *felt* the most forcibly."

"What?" I asked.

"The narration of her wanderings after leaving Rochester's, until, faint and weary and famishing with hunger, she approached the home of the St. John's."

"You have a true woman's heart, I perceive," said I.

"The occurrence is sketched with a masterly hand, but not in such a graphic manner, to my mind, as the scene in the church, when Rochester attempted to marry Jane, but was balked by Mason. It is truly grand; see how Rochester's character stands out and speaks through his words and actions. Ah! that is genius;" and closing the volume, I remained silent the rest of the evening.

On Christmas eve I dismissed school by telling the children they were free until after New Year's, which pleasing information the boys greeted with lusty shouts, as they rushed from the room and tossed their caps high in the air, while the girls smiled happily as they quietly followed the boys, bidding me good evening as they passed out the door, and soon after I walked slowly homeward. The young folks in the village had made great preparations for the holidays; and, as I was free, I could engage in any enterprise they might present. Fortunately a heavy snow had fallen, and we had excellent sleighing during the time, which we improved to the fullest extent. Several sleigh-loads of us went to Nauvoo, where we had a glorious time; and then we went to other towns in the vicinity,—in a word, we were out somewhere every evening, making the dense atmosphere reverberate with the music of bells, and with our loud, happy laughter. I had never enjoyed society so well in all my life. All endeavored to contribute to the happiness of others, and by so doing they rendered themselves happy. There was none of that selfishness manifested so apparent throughout the West to every stranger; but instead, all were kind, sociable, and very friendly to one-another. The festivities of the season were brought to a close by Thalia giving a large party on New Year's night, when everything passed off in superb style. The supper, mostly prepared by Thalia herself, was excellent; the meats were of the tenderest, the fruits of the sweetest, and the cakes the lightest, to all of which ample justice was done. And the company were gay and mirthful, but not boisterous; free and courteous, without overstepping the bounds of etiquette, so that, when "the clock *tolled* the hour for retiring," we bid one another good-bye, with feelings of regret to think that such good friends must part.

The next morning I commenced school again, and then everything went on in its accustomed routine,—the tedious recitations throughout the day, with the studies and reading during the evenings.

The happiest hours of our existence are too sacred to be paraded before the public eye, and so we lay them by like invaluable gems, in the great storehouse we call memory, to review them at our leisure. Of such hours were the evenings composed when passed in Thalia's company,—I have them all laid away in my storehouse; but I have not the power to present them, so as to read as I *felt* them then,—as I *feel* them now when turning over the blotted leaves of life's record.

And thus the Winter passed away; the snow disappeared, leaving the fields fresh and green; the cold Northwesters were succeeded by warm rains, and finally the blue-birds and robins sang "Spring has come!" I was sitting in my room by the open window one morning, endeavoring to fix my mind on one of the most phil-

now what will you give

I had never seen her look more beautiful, and, bending down, I kissed her, saying—"That is all I have to give." The blood mantled her cheek with a richer dye as she sprang to her feet exclaiming,—"How dare you do such a thing? Now, to punish you, I shall leave immediately," and as she ceased speaking her fairy form glided from my presence, carrying all the sunlight with it, leaving nought but shadows behind.

My school closed with an exhibition. The pupils acquitted themselves very creditably on the occasion, while the directors passed a vote of thanks, complimenting me for the manner in which I had "discharged the arduous and important duties imposed on me as a teacher of youth." It had been the custom for many years, as one of the directors expressed it, for to employ a female teacher during the Summer; therefore my occupation was gone. After settling up my affairs, I began to think of my postponed trip to the Territories; but I was so pleasantly situated that I had no will nor desire to leave.

One evening, as I was seated on a rustic bench beneath a large shade tree—a monster elm—in the front yard, engaged in a deep reverie, I heard a light footstep, and the next moment Thalia stood by my side.

"I am very glad you have come," said I; "take a seat and let us talk a while,—it may be the last opportunity we have."

A shade of seeming sadness flitted across her fair face as she replied,—"Why so? You do not intend to de-

sert us now, just as we have become such good friends, do you ?"

"Why should I stay ?" I asked seriously, and, fixing my eyes on her's, I awaited the answer.

"I hardly know," she said in a sweet, confiding tone; "but we would miss you so much; besides, I want you to stay and help me tend my flowers this Summer. I have some coming up now; let us go and see them." And together we walked among the flower beds, until the damp dew warned us to return to the house.

Ever since I became acquainted with the family, I had often heard them speak of an old acquaintance in California, and although Thalia spoke of him as a friend merely, her mother on one or two occasions alluded to him as likely to occupy a nearer relation. When we entered the sitting-room, Thalia passed on through, and I was left alone with her mother. After I had taken a seat, she turned towards me and said,—"Charles has just received a letter from Mr. Stiles. He will return from California shortly; in fact, I shall expect him in a week or so at farthest."

"Has he been successful ?" I asked.

"I think he has; at all events, he says he is satisfied with his labor; and when he went there, which was before Mr. Myrtle died, he declared he would never return unless he could bring enough to live comfortable on for the rest of his days." A moment's silence ensued, and then she added more seriously,—"He used to think a great deal of Thalia, and I am glad to think that he has done well."

Poor woman! With all her goodness of head and heart, after all her experience in life, she still thought happiness was the natural offspring of so many dollars and cents. Perhaps it was her unfathomable love, her great concern for the happiness of her only daughter that blinded her somewhat. Let us hope it was.

I went to my room that night fully determined how to act. I sat down by the open window, and looked forth on as lovely a scene as the eye of man ever rests upon. The full, round moon, brilliantly red, was just looming up above the distant horizon, and I watched the stars as they grew pale and dim before the increasing splendor of their sovereign Queen. I listened to the few insects that chirped their monotonous songs without, while the cool, pure breeze sighed low and musically through the budding branches of a locust near by. Strange thoughts flitted through my mind that night. The subject on which I felt the most interest, before dim and uncertain, a subject for mere surmising, was now clear as noonday. Mr. Stiles had paid his addresses to Thalia—had been discountenanced by Mr. Myrtle for various reasons, the principal one of which was his poverty,—so he went to California to seek his fortune, had been successful, and now—I tried to reason differently, but no, it was all too plainly the case—now he was returning to claim her hand. I shrank back to my former self at the thought.

Here let me humbly kneel at the confessional, and break the sealed leaves on which I had traced some of the most sacred visions of my heart. I, Clarence Clifford, a friendless wanderer, far from the cherished spot called home, afar from all who loved or cared aught for me, had *dared* to listen to the syren song of Hope. I had *dared* to picture a home—a neat cottage home, situated on the noble "Father of Rivers," with a spring of pure water bubbling out from the roots of an ancient elm near by; with serpentine walks, and mounds, and circular beds; with flowers and fruits and evergeens; with golden crops of corn and grain that waved before the autumnal winds; with a library filled with standard works, and a cozy sitting room, where on each evening might be seen two persons, one a young man of twenty-five or thereabouts, reading aloud to an attentive listener,—a fair, sweet creature, who sat by the stand with some sewing work in her hands, now taking a few stitches, and then looking up in the face of the reader, with pure heart-born affection beaming from her bright eyes,—no, no! I whispered to myself that night as I shrank back to my humble self;—"it *might* have been," but now it can never be, and so I banished that bright vision—a vision that will stamp itself on every true heart some day or other,—I banished it that night, as I thought, *forever*, and I retired with my plans all laid down for future action.

During the Winter I had formed the acquaintance of a young man who was teaching in the Prairieville Academy, and I had often heard him express a desire to visit the Territories of the North-west, and the following morning I called on him. His school had just closed successfully, and when I proposed taking a trip to the West, I found him not only willing but eager to start. This pleased me very much, for, of all persons with whom I was acquainted, I would prefer him for such an expedition. He had an excellent education, being a graduate of one of our eastern colleges; besides possessing natural abilities of a high order. But his disposition caused him to excel for such a journey. Tall and well formed, with a handsome face and lofty brow, he possessed one of those nicely balanced organizations but seldom found,—a constitution that acted on his mental organs, as mercury is acted upon by heat and cold, always rising or falling to suit surrounding circumstances. There was none of the nervous temperament about him; no sensitive excitability; but, instead, a calm, steady temper, a firm, deliberate judgment, viewing all the ups and downs of life with a philosophic coolness. His peculiarities in this respect will be duly presented as we proceed.

At dinner I announced my project to the family. It seemed to surprise them all, and Mrs. Myrtle asked when I proposed starting. "On Monday next," I answered, and Thalia, in an absent manner, said slowly,—"So soon," and then left the table hurriedly. I continued my remarks, and told them of the pleasure I expected to realize during the trip; of my hopes and expectations; but as it seemed to sadden them somewhat, I changed the subject, and soon after went to my room and commenced packing my trunks.

Monday morning came, as beautiful an April day as I ever witnessed. I had my things taken to the nearest railroad depot the Saturday before, and expressed to Council Bluff, and now, as my horse was already saddled, I had only to bid the family adieu. I never feel my weakness so sensibly as when about to bid valued friends good-bye! Ere this I had been guilty of unpardonable breaches of good manners, by slipping off without seeing my friends, but now I could not, so, summoning all my courage, I grasped Mrs. Myrtle by the hand, and, after a few appropriate remarks, bid her farewell. "Good-bye," she said; "may God bless you, Sir. You have my best wishes for your success."

Charles promised to meet me in town, so I passed him by; but the hardest trial was yet to come,—Thalia passed out while I was speaking to her mother and stood outside the door. We walked down the path in silence. When

we reached the gate I made some common-place remarks, to see if I could command my voice, and then took her hand. It trembled slightly. She was the first to speak. "I can hardly realize that you are going to leave us for good, Clarence," she said.

"Then you are really sorry that I am going," I said.

"Of course I am; do you deem me a Stoic?"

"Not at all, my dear friend; I only wished to receive the assurance from your own lips that I would be remembered. Depend upon it, that knowledge will console me in many an hour of despondency. You will write to me, will you not?"

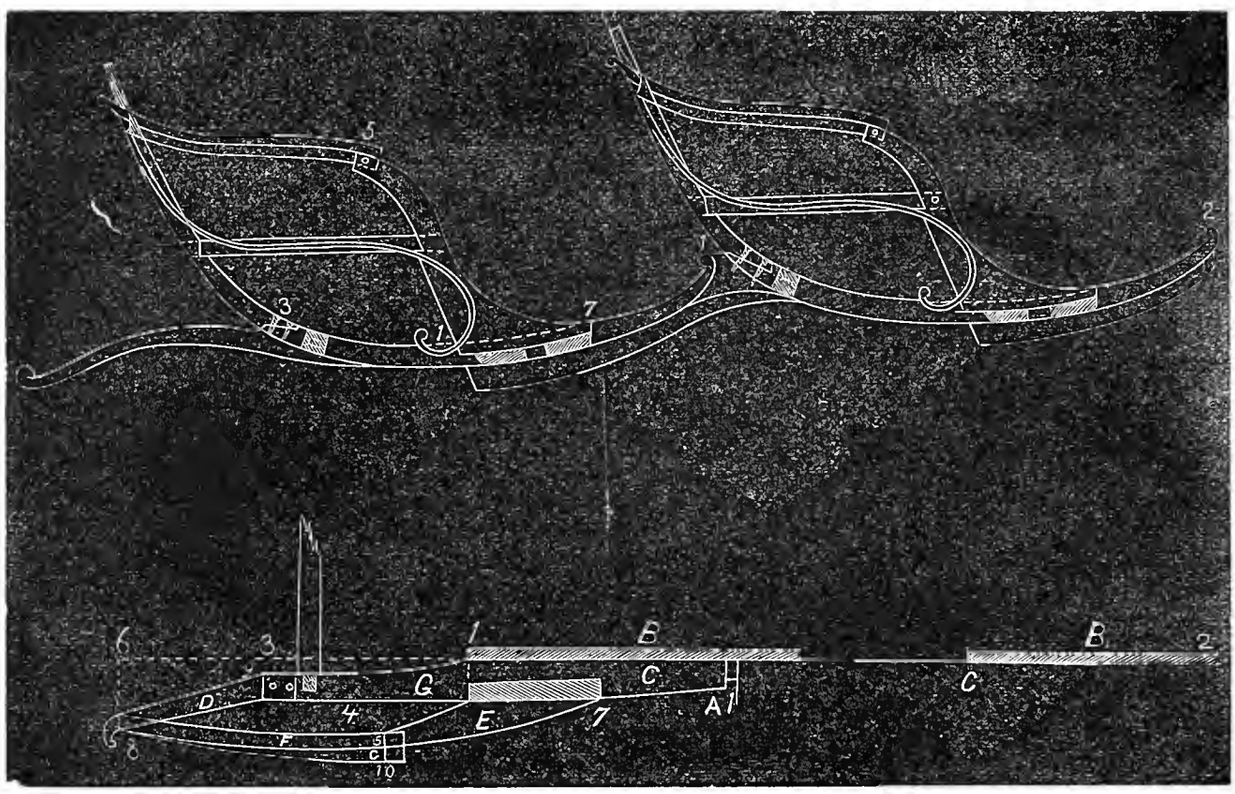
"If you desire it," she said; "but I fear my poor letters will soon become tiresome."

"Do not hint such a thing," I answered. "I will treasure them as the sweetest mementoes of a very dear friendship."

I looked in her face, and for a moment I trembled. I was leaving my best friends, and in a manner unsatisfactory to myself. I was on the point of speaking on a subject still nearer my heart when she said, in a gayer tone—"I wish you would stay until Mr. Stiles comes home; I should like to have you form his acquaintance."

My wavering left me in an instant, and I replied,—"I should like to see him very much, but I cannot postpone my departure now for that purpose;" and then I added, in a more serious tone,—"these long partings only tend to embarrass, so good-bye!" and bending down I kissed her, which she returned affectionately, then relinquishing her hand, I sprang in the saddle and galloped off. And thus I crushed the growing passions of my heart—crushed them? —no, no, only smothered them, at best. If I could *forget*, there might be some hope, but as it is,—never!

(To be continued.)



DOUBLE PHAETON WITH CANT-BOARD.—½ IN. SCALE.

ENGLISH CARRIAGE ARCHITECTURE.—NO. VII.

THE line from figure 1 to 2, shows the distance from the back of the sham-door in the body at the right hand, to the toe-piece of the rocker in front.

From 3 to A 1, is the extreme length of the bottom-side from the joint of the hind corner pillar to the center of the scroll.

From 4 to 5, shows the throw-out of the front pillar; 6 to 8, the throw-out of the corner pillar, allowing for the thickness of the bottom-side.

From 1 to 9, shows the inside of the bottom-side when lightened out.

5 to 10, outside of the elbow.

The toe of the sham-door is seen at 7.

These same measurements are equally applicable to both of these bodies.

B B, designate the two rockers; C C C, bottom-side; D, the corner pillar; E, the front pillar; F, the elbow, and *a*, the outside of the elbow.

A carriage to which this diagram is applicable, will be found in volume second of this Magazine, on plate V. For this article we are indebted to the London *Carriage Builders' Art Journal.*

TRAVELING UNDER DIFFICULTIES.—In the *Evening Post*, published in Philadelphia, Sept. 4th, 1777, appears the following advertisement: "A person wants to go to Boston, and would be glad of a place in a chaise or wagon going there, or, if only half the way on that road, and a genteel price will be given. Any this will suit will be waited on by leaving a line with the printer." This being only eighty-three years ago, is very significant of the difficulties in traveling at that time.

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

CHAPTER IV.

CHRISTMAS eve, the night of the proposed festivity, arrived, and I never saw the sky clearer or the air more salubrious on an April evening in the North. The stars shone sharp and bright, as if fresh lamps were lit in each; no breath of frosty wind chilled the frame, and save when the eye encountered the leafless skeletons of trees, or marked the bare sward of gardens, nature gave no hint of Winter's presence. Tricked out in our best habiliments, Henry Burnet and I sought the house of Mr. Bright, and, as we neared it, the hum of voices from the brilliantly-lighted rooms told that many of the guests had preceded us. At the door we were met by the host and hostess, and, after being presented to and warmly welcomed by the latter, we were ushered into a capacious, well-furnished parlor, where some forty ladies and gentlemen were assembled. This afforded a capital opportunity for the exercise of Bright's favorite hobby—introducing—so he marched us around, and we bowed, scraped, smiled, and said, "Happy to—"&c., to every person in the apartment. Most of our shop-mates were there, or arrived afterwards, and some of them insisted on introducing us, over again, to *their* special friends, and, in short, we got acquainted *considerable*. The free, unconstrained spirit that prevailed was truly refreshing, and jest, repartee, fun, and flirting were the order of the night. A majority of the ladies were young, many pretty, some beautiful, and all agreeable. Oversmasher, the painter, was there, done up in a swallow-tail coat with brass buttons, pantaloons of barber-pole pattern, and a standing shirt-collar exaggerated in height, and of portentous stiffness. Woe to his ears if, in a moment of forgetfulness, he should shrug his shoulders.

"Mista Horn! ladies an genelmen," cried a negro servant, opening the door and ushering in that individual.

His appearance astonished, puzzled, and dumbfounded me; indeed, if I had not heard his name announced, I would, in all probability, have failed to recognize, in the splendidly dressed man who strode into the room, the somewhat shabby-looking Horn of the shop. Nodding right and left to acquaintances, he marched through the apartment, and approached a bevy of girls assembled around the piano. With a series of bows of elaborate finish he paid his respects to the group, said something nice to each, and then deposited his person with artistic grace on a chair, wiped his countenance on two dollars worth of linen, coughed delicately, and proceeded to address the assembled fair ones. A low whistle of astonishment at my elbow caused me to turn, and Burnet was at my side, gazing with protruding eyes, open mouth, and upraised hands, at the expensively got-up figure of our sulky shop-mate. Jones, the wheel-maker, approached, and, seeing what attracted our attention, asked us what we thought of Horn *now*.

"*Think?*" I said; "why, I think that I never saw so complete a change in the appearance of any human being—he looks like a new man."

"Too nice to handle," whispered Henry.

"I wish you could see him *drunk*," said Jones; "he comes a good deal nearer being a *brute* in that condition than he does being a gentleman in that fine harness of his."

"*He* doesn't get drunk?" queried Henry, in surprise.

"Yes, *he* does," said the other; "and in that state he is an ugly customer—quarrelsome and full of fight. He looks gentle as a calf now, for he is a great ladies' man, and—but hear comes the music, and I must get a partner for the first dance."

He left us, and I saw that preparations were in progress for "tripping it on the light fantastic toe." Both parlors were converted into one by throwing open folding-doors, and there was a rush for partners and places on the floor. My friend and I secured a couple of fair Alabamians, and took positions in one of the "sets;" the music—three fiddles, propelled by the same number of Africans—struck up. "Circle all!" yelled the boss fiddler, and away we went, skimming through the mazes of a quadrille. Burnet and I were in the same set, as was also Horn, and, during the intervals of the figure, I noticed that the latter had for a partner the handsomest woman in the room. She was a perfect vision of beauty—twenty-two—of the most witching kind. Her face was a round oval, with features of delicate regularity, great roguish brown eyes, and a sweet, rosy mouth, that seemed fashioned into one perpetual smile—not one of those frivolous, meaningless simpers learned and rehearsed before a mirror, but the real sunshine of a light, joyous heart. From a forehead of promising intellectuality were parted pendant curls of jetty black, that threw dark, flitting shadows on the mixed rose and lily of her cheeks. The massive, dull countenance of Horn, overspread with a half-abortive smirk that he had conjured up, looked almost hideous beside the dazzling face of his partner in the dance; and his awkward motions were elephantine compared with the easy, exuberant grace of her motions. The lady with whom I danced noticed my look of admiration, and, during a pause in the music, asked me, archly, if I didn't think Miss Gay was pretty.

"*Pretty?*" I said, enthusiastically; "she is beautiful as a dream—did you say her name was Gay?"

"Yes, Maggie Gay. I will introduce you after the dance, as you seem to have taken a decided fancy to her; but I warn you," she continued, smiling, "to beware of your heart—Maggie is a sad flirt."

I was about to reply, when the object of our conversation came tripping across the floor to where we stood and said to my fair companion, in a tone of pretty vexation—

"Em, do fix this head-dress; it makes me feel as if I had wings on my head like 'Mercury' in the picture-books!"

The coquettish superstructure of velvet and violets was attended to, and then my partner introduced us.

The fair girl bowed demurely, then, her face lighting up suddenly, she said, "Bradly! Bradly! where have I heard that name? Oh! I have it—were you ever blown up, or burned, or sunk, on a steamboat?"

This was uttered so eagerly and with such a saucy elevation of eyebrows, that I laughed outright.

"Yes," I said, "some such accident happened to me some two months ago."

"And there was another gentleman with you?"

"Yes."

"Where is he?"

I pointed to Henry, who stood at a little distance, conversing with a lady.

"Do you mean that handsome man with the curly hair?"

"Yes."

"Well, sir, I've heard all about it: and I want to speak with you after this dance is over—remember," and she returned to her place.

My eyes followed her retreating form and encountered those of Horn looking the sharpest kind of daggers. Can it be possible, I thought, that *he* loves that girl: and then I thought of what she had said, and wondered how she had heard of the part we played in the sad affair on the river, and *what* she wanted to say to me.

The music again commenced, and the set was finished. After conducting my partner to a seat, I went in search of Miss Gay, and found her standing by a half-open window, in company with several ladies and gentlemen, one of the latter being Horn. When I approached, she begged them to excuse her, and, taking my arm, we retired to a corner of the room, where we found seats.

"Now, sir," she commenced, "I might bother you terribly by making you guess *who* told me about the wreck and your adventures, but I wont. Last month I received a letter from the best friend I have on earth—always excepting my mother—and she told me all about it."

"And that lady," I interrupted, "who was she?"

"Now, Mister Curiosity, do be patient and you shall learn. But, not to keep you in suspense, her name is Ellen Edridge, step-daughter of John Burnet. They had been North to spend the Summer, and were on the way home when it happened. She told me that you saved her life, and what a nice gentleman you are—now, don't blush—and how your friend saved her dear, sick mamma, and helped you to save old Burnet, or, you helped him, I don't remember which; and how your friend was so sulky, or so bashful, that he never spoke to her or her ma, though they wanted to thank him, as all ladies do in such cases; and how, when Mr. Burnet went to thank him for them, he nearly bit the old gentleman's hand off, and then walked away looking as savage as a wild Indian. What is the reason Mr.—but you haven't told me his name—acted so strange? I'm sure he is not cross or bashful to-night, and he looks too good to act ugly without some cause?"

"You do him no more than justice," I answered; "he has a noble heart, and his conduct on that occasion you can easily account for when I tell you that the very man to whom he rendered so great a service has injured him and his beyond reparation, though he is the young man's own *uncle*—my friend's name is Burnet, also."

"And did he know his uncle when he saw him struggling in the water—did he know the lady was his wife?"

"Yes, he recognized him when they came on board of the boat at Cincinnati, though they had not met for ten years. The elder Burnet did not, however, recognize his nephew."

"Then he has a noble heart, truly. Was this wrong you mention of an aggravated character?"

"Yes," I answered. I am not at liberty to enter into particulars, but, had the case been mine, I fear that I should have been tempted to push his head under water instead of holding it up."

"Well, Mr. Bradly, I am glad that I have made your acquaintance, and you must introduce your friend to me. I will try," she continued, archly, "to like you both for Ellen's sake, at least, and perhaps for your own, if you behave yourselves."

"And Ellen—Miss Edridge—she suffers no ill consequences from the disaster, does she?"

"Oh, no! nothing farther than the loss of her wardrobe and a little nervousness occasionally; but she will be here to visit me shortly, when she can speak for herself. She will be astonished to find you here, for, judging by her letter, she imagines that you are in Tuscumbia."

"I shall be much pleased to see her again. Will her stay be long or short?"

"Long, I trust. We were school-mates together, and have been warm friends from earliest childhood, and she often spends a few months with me. She lived here until her mother married Mr. Burnet."

"Then I may hope to enjoy much of her society; but see, they are taking the floor for another dance—are you engaged?"

"No, sir."

"In that case, may I have the pleasure of dancing with you?"

"Certainly."

The dancers were forming in two parallel rows, the ladies on one side of the apartment and the gents on the other, as if for a "country-dance," and I inquired of my companion the nature of it, fearful that it might be new to me.

"Oh, it is simple enough," she replied, "and you will soon understand it. We will take a position near the center, so that you can see the figure before our turn comes; they commence at both ends of the line. See, there goes the German painter with his partner,—what a grotesque-looking couple!"

Oversmasher was strutting along towards the end of the line with an elderly lady hanging to his arm, whose broad, red, jovial face was a fitting match for his own; and the analogy between them was rendered still more striking by certain very broad eccentricities observable in the costume of the latter.

The dusky orchestra now struck up a lively reel tune. A couple from each end of the line darted down the outside in opposite directions, and then up the center again. A dark mass of claw-hammer coat, shirt-collar, and feminine dry goods shot past, and, stopping at the end, revealed the Dutchman and his fat partner. "Balance four!" yelled the chief fiddler. The Teuton kicked out right and left; tried to shoulder his coat-tails; couldn't; kicks at the lady; missed her; cramp in his right leg, but does double duty with the left; brings both hands down on breeches pockets as if dubious about the location of his pocket-book. [Promenade all.] Finds all right; seizes his partner, and bobs up to the head of the line; kicks out twice, and bobs back again; lady puffs audibly, but successfully dodges, kicks, and imitates bobs. [Ladies change.] Lady jerks another lady out of the line, turns her around, then serves a gent the same way; gent jerks somebody else. Lady jerks Oversmasher; he jerks *another* lady; they all kick out miscellaneously, and bob back to their places.

I caught the eye of Henry, who was an intent observer of all this, and the comical look on his face nearly choked me. I turned to Miss Gay and tried to speak; she looked at me, and her silvery laughter rang out above the din of music, voices, and the stamping of feet.

"Just wait until you try it," she cried, gaily; "I do hope you will get bothered for laughing so at others."

The laugh was general, and the dancers that followed did their best to keep it up by cutting all manner of funny

antics, and in this the host carried off the palm, for in executing some extra touches he split his coat clear up to the collar. His partner had to stop and hold her sides, and for a while the music was drowned in gleeful shouts in all keys, from a treble to a thorough bass.

(To be continued.)

Home Circle.

For the New York Coach-maker's Magazine.

THE ADOPTED DAUGHTER.

BY MRS. L. H. SIGOURNEY.

Oh! young and beautiful! Thy step
Was light with fairy grace.
And well the music of thy voice
Accorded with thy face.

And blent with these attractive charms,
How fair it was to see
Thy tenderness for her who filled
A mother's place to thee.

Yet all the pure and holy ties
Thus round thy being wove,
They are not lost—they are not dead—
They live a life above.

I see thee when the midnight dreams
Their wild dominion take;
Thine accents, like the blue-bird's song,
I hear them when I wake.

What though the sleepless care of love
Might not avail to save,
And grief, with ever-dropping tear,
Holds vigil o'er thy grave;

Faith hath a rainbow for the cloud,
A balm for sorrowing pain;
A promise from the Book Divine,
To meet—nor part again.

For the New York Coach-maker's Magazine.

AN OLD STORY IN A NEW DRESS.

BY LUA DELINN.

'Twas a tulip-tree—a stately one—on its topmost branches, where
Two parent-birds had built their nest, and reared their eaglets there,
A hundred Springs had twined their wreaths about it, like a crown;
A hundred times in Winter's path it had flung them meekly down.
Its emerald crown was given back more fair each year it stood:
A fitting home for the "king of birds," with that monarch of the woods!
The food their little ones required they found upon the shore,
Beside the sea, whose waters dashed full ten miles off, or more;
And at a certain hour each day, in storm or sunshine bright,
The mother, for that distant goal, would take her rapid flight.
One sunny day, all wearily her pinions drooping waved,
For she was heavy-laden with the food her young ones craved;
But evil eyes had marked her flight, and evil hands were nigh,
They heeded not the old bird's pain, the young ones' hungry cry.
And *does* the strong hand *ever* spare, when the weak for mercy pray?
Before the eagle won her nest, they snatched her spoil away!
One moment only did the bird so weary pause to rest;—
Some human hearts would better be for such love as warmed her breast;—
She paused to soothe her little ones, to hush their clamorous cry,
Then spread her wings, and soon appeared a speck against the sky.
She came again, on heavy wing, with her heavy freight of food,
Nor lingered till she flung it down before her famished brood.

Full many of the feathered tribe thy plumage can outshine,
And many a bird, thou glorious one, hath sweeter song than thine.
Not theirs the *spirit*, when opposed, unmoved to keep its way,
And thus to triumph over wrong, as thou hast done to-day.
There's many a *human* head would droop, and human *heart* [illegible]
fail,
Mourn o'er its wrongs, and, while it mourned, *still*
prevail.

For the New York Coac[illegible]

KITTIE LEIGH'S LE[illegible]

she said gaily. "Make yourselves at home, do. Mr. Ashley, be seated. Let me take your hat." "No, thank you, Aggie, I can't stop long." "Can't stop long!" repeated the merry girl, "I declare for it, Frank, it's the first time." Then, as if frightened at her own boldness, she covered her pretty rose-bud mouth with one hand, [illegible]tched Frank's hat with the other, and bounded from [illegible]. You may be sure, Jennie, it was not long ere [illegible]use to follow. I found Aggie in the hall, [illegible]ceeded to the great wood-shed, back [illegible]en and Allie were waiting us, and [illegible]y time.

[illegible]hley the evening before, [illegible]of stories about his [illegible] certainly — "I

round, and yet there came no tidings; and his father's hair grew gray, and his mother's eyes dim with weeping.

And then there came tear-drops in Lizzie's blue eyes, and I wept with her, as she told me how, at the close of one Summer's day, as his father offered the evening prayer, Frank came once more to the old home, came and knelt in the accustomed place, beside his sunny-haired sister. Poor he was, but penitent, asking them all to forgive him, as he knew his heavenly Father had done.

"It's just two years to-night, Kittie," she said, "since Frank came here and told me how he had loved me all the while he had seemed so cold and thoughtless, and asking me to be *his* sometime when he had a home for me." Frank is all we could wish for now," she said, proudly, as she wiped the tear-drops away. "His father did not live long after Frank's return, and now he has full charge of everything. And, Kittie," she continued, "if you stay here until September you may be my bridesmaid, for that is the time we have chosen."

I stooped and kissed her glowing cheek, and murmured my congratulations in her ear. Dear girl! may no shadow dim the beautiful sunshine!

"I've been looking over the old Bible to-day," said grandmother, as I entered her pleasant room one evening just before tea, "and I hardly think, if you were to read over the births and marriages as they're recorded down here, you'd think of 'em being the names of the folks that live here now. They've got to changing names round so, you see. Now, the names of Richard's children, as they're recorded down here, are, Elizabeth Jane, Agnes Lucinda, Alice Belinda, and Benjamin Franklin. And now, on all their letters and papers, and in all their books, they write 'em Lizzie J., Aggie L., Allie B., and Ben F. Now, if that aint one way of shortening, I don't know what is. 'Lizabeth's going to be married this Fall, I s'pose, and I guess she's going to get about as nice a man as you'll see anywhere, too, if I do say it myself. I remember when he was named just as plain as if 'twas to-day, and he was called then Franklin Jonathan, after two of Miss Ashley's brothers. But now he's Frank J. Ashley, and I s'pose it'll be recorded down here one of these days, married to Miss Lizzie J. Clayton. Well, I s'pose they think that'll sound mighty nice, and I aint going to say anything agin it. Young folks must have their own say. And now we are talking about names," she continued; "how do you write your name?" (The truth is here, Jennie, I was named for dear grandmother, *Catharine.*) "My parents always write it Catharine," I replied, "but sometimes my young friends shorten it, just as they do here, you know." "I thought likely your father and mother wouldn't alter it," she said, and I saw, by the smile on her good, kind face, that I had happened to make a right answer. Just then Allie came to announce tea, and the subject was dropped.

I had almost forgotten to tell you there is to be a Sabbath-school Pic-nic four or five miles from here, on Independence Day, *which comes here, the same as in the city, on the fourth of July.* Yesterday afternoon, Mr. Walter Cameron, a brother of Mrs. Mayson, the minister's wife, called here, and inquired for Miss Leigh. I had just returned with Ben from the meadow, where we had been searching for strawberries, and can assure you did not look much like making an appearance. However, something must be done; so, brushing back my hair very hurriedly, and fastening on Lizzie's collar (in absence of

my own), I hastened to the parlor. In the hall I met Ben. He had some dandelions and apple-blossoms, which he insisted on my placing in my hair. I was obliged to accept the latter, but wholly refused the former.

Mr. Cameron seemed not to notice my dress, and after conversing very briskly for a few moments, asked me if I was engaged for the coming excursion. Finding I was at liberty, he requested the *pleasure* of my company on that occasion, which kind invitation I accepted.

Lizzie and I anticipate a delightful time. A pleasant Summer day in the woods, Jennie, will it not be *delightful?* I will give full particulars in my next. But hark! —I hear the dinner horn, which reminds me of the promise I made to assist Lizzie in passing coffee at table. I must close this, and hasten down.

Let me hear from you soon, my dear Jennie, and believe me now, as ever, your true friend,

KITTIE LEIGH.

Pen Illustrations of the Drafts.

MESSRS. BECKHAUS & ALLGAIER'S HEARSE.

Illustrated on Plate XXII.

CONSIDERABLE interest having been manifested in Philadelphia, in relation to this elaborate hearse, from the manufactory of Messrs. Beckhaus & Allgaier, we are induced to present a design of it to our readers. It was made for F. Lakemeyer, of Washington, D. C., at a cost of sixteen hundred dollars, but is now in the possession of R. Patterson, of Pittsburg, Pa. As may be seen in our engraving, there is much carving about the body of this hearse, chiefly emblematical of immortality, very beautifully executed. The sides are of plate glass, enameled with figures representing the virtues which adorn the Christian character. This enameling is comparatively a new discovery, and in this instance was done by Kraus, of Baltimore. The glass are so contrived that they may be removed at will, and heavy drapery substituted in their place. The body is principally mahogany, paneled, and highly polished to an ebony hue, and relieved by silver mountings. The dickey-seat is very tastefully trimmed, and the whole vehicle a magnificent affair, and very creditable to the ingenuity of Mr. Allgaier, who, we understand, was the designer of it. The style of workmanship is what is known as ornate gothic. We suppose there is no country where so much expense is lavished on vehicles for carrying the dead as in our own, and we take this occasion to thank the firm who have so kindly put it in our power to add this hearse to those previously published in this Magazine.

THE RENFREW PHAETON.

Illustrated on Plate XXIII.

THIS original design, which we have named the Renfrew, is so called in commemoration of the visit of the Baron with that title to this country. The body of this carriage is of very simple design and easily constructed. An ash rocker extends the entire length of the body. The back-quarter is worked in the solid from whitewood plank secured to the rocker by screws and neatly molded. Dusters, or side-wings, are a decided improvement to this kind of carriage. In hanging-up this job, it will be necessary to exercise taste and judgment. A carriage built after this design, will no doubt make a very pretty thing, and one that would find a very ready sale.

NEW ENGLAND BUGGY.

Illustrated on Plate XXIV.

ONE might very reasonably conclude that in the many varieties of form, in which vehicles passing under the name of buggies, have been presented to the American public, invention had about exhausted itself; yet so far from this being the case, every return of the seasons, something new is presented either to please individual taste, or to satisfy the vagaries of tyrannical fashion. Among a certain class of our New England friends, the buggy we illustrate in this number has found considerable favor. The seat we have added to it is a New York "institution," but the body, which is frequently made with a deep bottom-side, as in our drawing—where light appearance is an object—is often left open in the form of the arch. The rocker, which is sawn out of a $\frac{3}{4}$ inch maple or cherry board, extends the entire side of the body. To this the panel of the body proper, formed of whitewood, is secured by screws from the inside, after which the swell, when desired, is given to meet the wishes of the manufacturer, and the moldings worked in the solid, when required.

For the New York Coach-maker's Magazine.

WHY ARE ROCKAWAYS SO CALLED?

CINCINNATI, OHIO, Oct. 31st, 1860.

E. M. STRATTON, ESQ.:—*Dear Sir,* I would like to learn, through the Magazine, or otherwise, the history of the term *Rockaway?* A carriage-maker who worked in Newark, N. J., thirty years ago, informed me that the term was not used there at that time for anything; but, bodies now called Rockaways, were then called Barouches, and he supposes that some peculiar style, originated at Rockaway, Long Island, N. Y., having received that appellation, the term was at length applied to the whole class in the same way that the term buggy (which at first was merely a cant term for a certain kind of Phaeton) superseded Phaeton. Yours, respectfully,

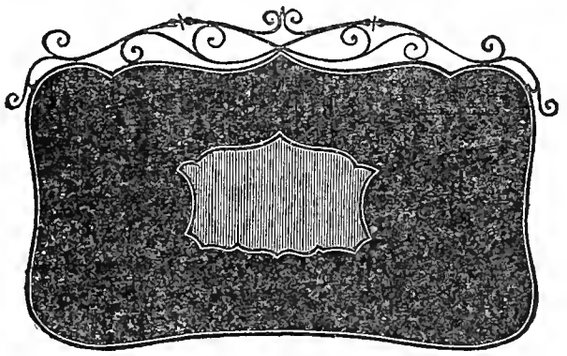
R. LURKINS.

[The carriages alluded to, thirty years ago, were more frequently called chariotees, but sometimes Barouches. These, however, were a heavier class of vehicles. The term Rockaway is derived from a coarse description of beach-wagon, originally popular in the celebrated watering-place above mentioned, some eighteen years ago. This popularity has led to the production of a finer and more complicated class of work, such as is seen under a variety of patterns in our time. See remarks on page 189, vol. II.—ED.]

Sparks from the Anvil.

FANCY RAIL TO AN OPERA-BOARD.

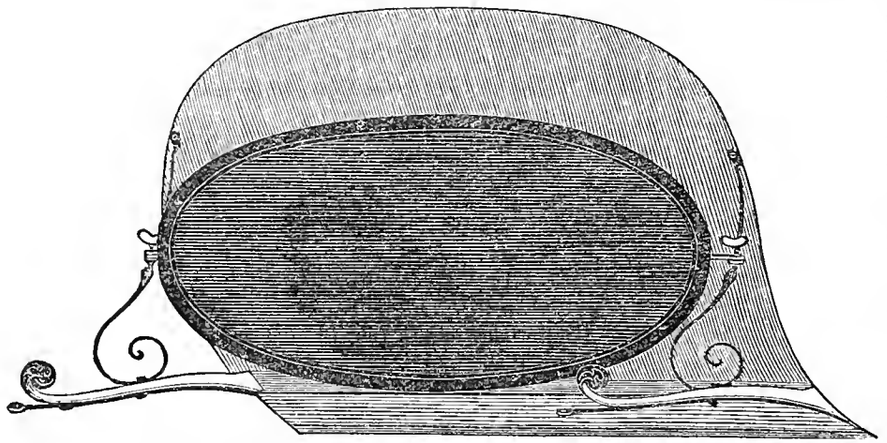
SOME may object to our design, as being more heavy than ornamental, while others will decide that it is a very



tasty scroll for the purpose intended. For this latter class we present it, and believe it will make a rich job, when properly plated, for the Southern market.

NEW MODE OF HANGING OPERA-BOARDS.

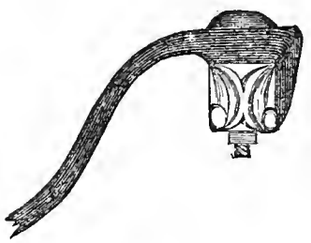
OUR engraving is designed to represent a back view of a carriage to which an opera-board (the baggage-rack of former days) is attached. This is done by securing it to the scroll-irons, when not in use, with a thumb-nut and



clasp-iron as we have endeavored to show. When required to be used, which may be seldom—for this fixture in our time is perhaps more for ornament than use—the board is detached from its resting-place and dropped into the eyes, shown at the ends of the pump-handle scrolls. This hanging-up, of opera-boards, does away with the heavy iron work required in the old plan, and thus secures lightness in this portion of a carriage, consistent with American tastes.

IMPROVED FORM OF BODY-LOOP.

SIMPLE as some portions of a carriage may be when separately considered, when taken in connection with the whole, they form no inconsiderable addition to the finish of the entire job. Such is the case with the body-loop under consideration. It is a decided improvement over the old mode, for, in addition to its greater safety in case the bolt should break, it relieves the strain given to the end of the spring-bar, which under some circumstances has caused a bar to split the entire length. It will be seen here that the back-end of the loop turns downward at a right angle with the upper side of the bar. The end of the bar is seen in the scroll represented in the drawing.



For the New York Coach-maker's Magazine.

LARGE AND SMALL AXLE-ARMS OF CARRIAGES.

MR. EDITOR:—I have often heard it remarked by mechanics, who profess to know it all, and more, too, that a wagon, having four-inch wooden axle-arms, will run over an obstruction with less friction than if the same load were on very small *iron* axle arms.

Now, can any one of the fraternity explain the reason of this so plainly that a "backwoodsman" can understand the wherefore it is, or *is not*, so? S. E. T.

For the New York Coach-maker's Magazine.

LENGTH AND SIZE OF WHIFFLETREES.

FRIEND STRATTON:—I desire to inquire through your Magazine *what length*, you, or your correspondents, consider the most proper length for *whiffletrees?* What proportion, *in size*, should the middle of a whiffletree bear to the ends? If they be made of the best of timber, how small may the ends be made, and how large must the middle be, in order to be as strong as the ends? Which is the strongest, a *straight* whiffletree, or a gambrel-shaped whiffletree? What is the best style of ironing the ends of whiffletrees, when cock-eyes are used in the ends of traces? INQUIRER.

ANNEALING STEEL.—We would inform our iron-workmen that if they will take the trouble to dip their steel chisels, and other tools, at a red heat, which is scarcely distinguishable, in a tolerably dark place, such as the bottom of a tub, it will be thoroughly annealed, even in cases where it can scarcely be effected in any other way.

VARNISH FOR IRON-WORK.—Take 8 lbs. of asphaltum, and fuse it in an iron kettle, then add 5 gallons of boiled linseed oil, 1 lb. of litharge, ½ lb. of sulphate of zinc (add these slowly, or it will fume over), and boil them for about three hours. Afterwards add 1½ lbs. of dark gum-amber, and boil for two hours longer, or until it is become quite thick when cool, after which it should be thinned with turpentine to the proper consistency.

☞ The reader will find an interesting article in relation to the Haussknecht perch-coupling on page 138.

Paint Room.

For the New-York Coach-maker's Magazine.

GOSSIP FOR THE PAINT SHOP.

(*Concluded from page* 114.)

I HAVE curtailed my remarks on the finishing of a body, in order briefly to notice the painting of the carriage-part, and to endeavor not to occupy another chapter in treating this subject. That which I remarked upon paints and the mixing of colors in the earlier numbers of these papers, will apply to the carriage-part equally as well as the body; and so, we shall suppose our wheels and carriage-part are primed previous to going in to the blacksmith to have the iron-work fitted to them. Should you think proper, you may prime them with paint mixed with *raw* oil; but for the rest of the lead given I prefer to have it prepared so as to be sure of its drying hard,—for, you know, iron will not absorb the oil out of the lead, like wood. An allowance should be made, in view of that fact.

We will next give two more coats of oil-lead color, and sand-paper between each coat, which will make three coats for the wood, and two for the iron-work. We will now putty, and give one coat, mixed with one half turpentine and japan (if you think proper, and the boss has no objections, give it two coats), and get the surface upon this coat. After which it is customary to lay on the color or the groundwork of the color. Another coat of oil-lead should be given, for the same reasons that lead should be given bodies, after they are rubbed rough stuff, so as to have a foundation for the color independent of the first coats of lead. When you rub a carriage too close, you cannot avoid rubbing down in some places to the wood, or iron; and if for nothing else, this coat of oil-lead should be given. It will suit our purpose best to have it of a dark shade, because one coat of black will then cover. We look it over with putty once more, and slightly pass over it with the finest sand-paper (this last coat of lead should not dry quick, nor yet be prepared so as to remain sticky), and afterwards dust it off cleanly. It is now ready for one coat of oil drop-black (properly prepared as for the body), and after this is perfectly dry, give two coats of lake,—for the remarks upon which we refer the reader to what is said upon good and bad lakes on page 171, volume II.

After the second coat of lake is dry, we stripe the carriage black. For such a carriage, the width of the stripe ought to be about $\frac{3}{4}$ of an inch; but much depends upon the widths of the grooves or beads on the beds and futchells. They should be filled, and the stripe put upon every other part of the carriage should be exactly of this width, and not vary in any two places. One of the greatest features in good striping is, that the end of every stripe should be left as square as though cut off with a pair of sharp shears. This is but seldom considered by fancy stripers, but it will do more to show striping to advantage than any other thing; and, in fact, without this precaution is carried out, striping cannot be called perfect. The reader is respectfully referred to the engravings on page 229, of Vol. I., for examples. When the ends are thus perfected, they will be beyond criticism; but we shall endeavor to stripe *our* carriage right in every particular. We will therefore put one stripe up each side of the spokes, two behind, and three in front of the hub, one upon the middle of the felloes, and also black the tire. Stripe the edges of the springs (it makes a better finish), then a stripe down the center. We will cut across the end of each leaf, and be particular not to lay the paint on heavier than is necessary, for, if we do, it may give the whole job a chance to crack. This is especially the case when using quick drying paint.

After our striping is dry, we then give the carriage one coat of clear varnish,—not a heavy coat, nor yet a light one, but a medium coat, which every good painter knows how to apply. After it has stood a sufficient time to dry and harden,—which, of course, all depends upon the quality of the varnish used,—we shall rub it down well with ground pumice-stone and a woolen cloth. Never think of taking "hair-cloth," or "worn-out sand-paper," but rub it with as much care as you would a body,—it requires it, when you wish for a perfect job. We always wash off cleanly as we rub, as it saves a great amount of trouble afterwards. Being all rubbed and washed off clean, we shall next proceed to fine-line it in conformity with the body, having the paint exactly of the same shade, to accomplish which there is no trouble in our case, as we took the precaution to prepare enough color in its dry state both for the body and carriage, we shall edge the black stripe with our fine-lining upon every part of the carriage. To have the black stripe "edged" in one place, and a quarter of an inch off in another, is only child's work; for, when a thorough practical painter that fully understands his business comes to look at such striping, he smiles, and well he may, at some of the work done in our carriage-shops, and by men, too, who consider themselves *par excellence* in their business; but the reader will give us credit when we say we have done our carriage up to the point of correctness,—every part of it is in conformity with the rest. Now it is ready for the last coat of varnish.

It is almost always admitted as good policy "when in Rome to do as the Romans do;" but I often nullify this Romish maxim, and when it is necessary to make a two days' job of a nice piece of work, like ours, I always prefer it. To wash off a set of wheels, and varnish them upon the axle, is but a short job; and if it can be done on the day previous to the one you wish to varnish your carriage in, it is far preferable, for then you can take your wheels off, and have your carriage all clear, so that it gives you a chance to get around it, and give it that attention you cannot do when the wheels are upon the axle. I say this way is preferable for a nice piece of work; but for a majority of work it is immaterial. Of course we lay a nice flowing coat, just enough, but none too much.

Having our shop all clean, our brushes all right, we shall assume that our carriage looks as well with our two coats of varnish, judiciously spread, as five coats applied by the greatest expert in carriage-painting living. Gentlemen differing from this decision are reminded that their opinions are allowed, while, at the same time, we must be permitted our own.

And now, Mr. Editor, it only remains for me to close these Gossiping Communications; but, before doing so, please allow me to say a few words about the "NEW YORK COACH-MAKER'S MAGAZINE." Do the carriage-makers of this country know and fully appreciate your labors? From some remarks which you have previously made, I am led to believe that the encouragement given this

Magazine answers all your expectations; but, cannot it be more extensively circulated, so that the benefits it confers may be more widely acknowledged? It may be done, if the friends of the trade will each do their share in bringing it prominently before their fellow-workmen. It will take but little to convince any sensible man that, in subscribing for this Magazine, he will not only get the worth of his money, but will contribute his share towards keeping up the respectability of the craft; and in doing that, *he will advance his own social position and reputation.* Even should he never open its covers, it is worth the money paid as an ornament for the parlor-table; and as friends casually drop in to make a call, and as casually take up this Magazine and examine its contents,—though they may not mention it, depend upon it, when they see the respectable publication the trade supports, they will have a higher opinion of your calling, and, consequently, a higher estimation of yourself, personally. There is no other country that could issue such a publication for so low a price. The English have their journal at more than double the price of this. The French have theirs at almost double the price of ours; and I am told by competent judges that "our Magazine" more than "holds its own," in comparison with these, which are published in countries where labor is so much cheaper than what it is here. The price of this Magazine brings it within the reach of all. As much cannot be said for its two contemporaries. Their published prices would be severely felt from the pockets of the more common operatives of those two countries. But in this country, where is the man or boy that cannot economize twenty-five cents per month, and give it his support? When I was bombarded by the publisher's agent to subscribe for the second volume,—then in its second or third number,—I had no idea of doing any such thing; but a moment's reflection told me that in doing so I should contribute my mite towards the upholding of the craft. I easily surrendered, and, as I am one that likes to know everything from its beginning, I bought the first volume bound. Reader! if you have not already done so, "go thou and do likewise;" for you may depend upon it, the permanent establishment of this Magazine is a promise of better things, both for employers and employed. Through its influence, and at no distant day, I hope to see the trade united together from north to south, from east to west, in a bond of union which will protect both the employer and employed, neither antagonistical to the one or the other. Where is the trade that might have a stronger society and name,—the trade that is in more need of a protecting influence? Such a society, properly organized and carried out, would confer much benefit on all concerned. It is a question whether it would not conduce more to the advantage of employers than of workmen. It is hard for good and competent workmen to go unemployed for months together, and to know that a majority of shops are filled with but second and third rate help. It is hard for employers to pay men a price for their labor when they are not capable of returning an equivalent for that which they receive.

A society of the right kind would tend to obviate all this, and could not help but receive the acquiescence and support of all well-meaning employers. The benefits this Magazine affords are obtained by a free interchange of sentiments between workman and employers. Through its medium, more sympathy and a closer identity of each other's interests are encouraged and promoted. This is so plain that it needs only to be named to be seen; and all these exhilarating inferences we get at a very small cost. Governments find it difficult to get along without public exponents. Political organizations pay high for party support from party papers. Large firms and public corporations expend fortunes to reward those who advocate their interest and support their wishes and inclinations. Almost all the mechanical arts and sciences have their mediums, by which they are enabled to bring before each other and the public at large the benefits they confer upon the community. And now the coach-makers of America, in our friend Stratton (if he will allow me the familiar expression), have a champion who volunteers his services for their advantage, and at a nominal cost. Surely it is as little as the trade can do to give him its cordial support. If only one sixth of the men employed upon carriage work were to subscribe to this Magazine, the Editor would have a circulation that would do his heart good to think of. Brothers of the Brush, if you have a "first-rate fellow" working by your side that thinks nothing at spending twenty-five cents per day buying bad rum and worse tobacco (but whose heart would be likely to break if he were to spend twenty-five cents per month in subscribing for this Magazine), endeavor to convince him of his error, and persuade him that in taking and *paying* for this Magazine he is benefiting himself more than any others.

To those who have the ability and the inclination to contribute their experience in the several branches of carriage-making, I would say one word,—don't be afraid of your writing, or of being criticised by those who may be better educated than yourself; because no sensible man ever criticises the attempts of those who endeavor to instruct themselves and others under the disadvantages of an inferior education. The Editor has to depend upon such as you to crown his efforts with success. The craft have, in a great measure, to depend upon their own exertions for instructive matter. No amount of "filthy lucre" could induce the "Golden-mouthed Orator" to fill these pages with his experience of carriage-manufacturing; no Reverend Sensationist could supply these pages with articles upon the "Geometry of Carriage-Architecture." Let him "keep his eyes and ears" ever so "open," our Editor cannot receive his "foreign files" of news, and proceed with the shears to fill his columns with their contents; he cannot buy *his* "matter" by the foot, as political hucksters write and sell it. A great majority of the contents of this Magazine has to be "matter of fact," which will bear inspection and comment from those who are fully qualified to judge of its merits, as well, if not better, than the writers themselves; and such matter can only be obtained from those whose experience in the business makes them competent to give it. Had I consulted my own personal inclinations, I would rather have seen these pages occupied by some one more qualified for the job than myself; but as the Editor thought proper to insert my communications, I bow to his decision, feeling assured that, by what I have said, I have not made an enemy, or yet lost a friend. I would impress upon the mind of the reader that what I have said about painting is only one way of doing the work discussed. There are scores of others, no doubt superior to my own, and some of which I hope to see given in the columns of this Magazine. It would be arrogant in me to suppose that my views had been concurred in even by a majority of its

readers; but, by discussing and laying open the different ways men have in doing their different work, hints may be thrown out which may prove acceptable and valuable, even to the most finished workman.

With these few remarks, Mr. Editor, you will please accept my best wishes, both for yourself personally, and for the prosperity of the NEW YORK COACH-MAKER'S MAGAZINE, and that "your shadow (circulation) may never grow less," is the wish of your friend and obedient servant, E. E.

ORIGINAL ORNAMENTAL DESIGNS.

Illustrated on Plate XXV.

THESE very fine designs are from the same talented correspondent, Mr. Heimbach, of Wilmington, Del., who furnished those on Plate IV., of this volume. Added to those there published, they form a very pretty set of designs for the painter's use. We give the following directions for the shading, but after all the artist must, to a great extent, exercise his own judgment in this matter:

No. 1. The scroll-work in this design should be painted with yellow ochre, mixed with one fourth part lemon yellow, blended with white, and shaded with asphaltum in the darker portion of the engraving. The leaves turning up from the under side should be painted blue, and shaded with carmine. Touch up the ends of the leaves with deep chrome-yellow, and the scroll with white. The inside figure should be laid on a metallic ground, and shaded with asphaltum, touching up the ends of the leaves with white. The net-work should be striped with white and dotted with chrome-yellow.

No. 2. In this design the scroll-work may be painted with burnt umber, blended with lemon-yellow, tinged with burnt sienna, and shaded in the darker portion with asphaltum, touching up the ends of the leaves with light green. Use white in touching up the scroll. The top portion of the shield should be painted blue, and blended with white; the lower portion thereof being painted with white, and shaded with asphaltum. The stars should be gilt, and the bars painted vermillion and shaded with lake. The stripe over the border may be made, or painted with yellow.

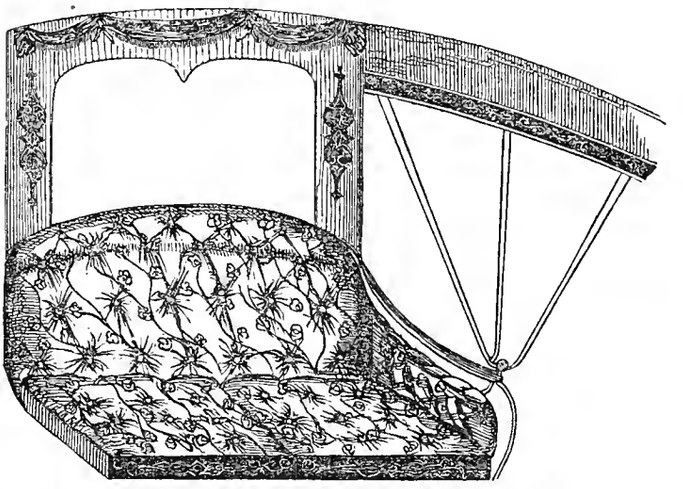
No. 3. Lay the foundation for the scroll-work of the shield on a metallic ground, afterwards shading it with asphaltum and raw sienna, touching up the ends of the leaves with white. Paint the upper portion of the shield blue, and blend with white. Paint the under part white, shading it with Vandyke brown. Let the stars be gilded. Color the bars with vermillion, and shade with madder-lake.

PRESERVATION OF TIMBER.—Baronet Menteith strongly recommends the steeping of timber in lime-water, in order to preserve it from rotting, either on land or sea. Ship timber, he thinks, should be steeped at least a fortnight.

Trimming Room.

LININGS FOR AN EXTENSION-TOP BAROUCHE.

THE engraving accompanying this article represents an original design for the back portion of the top to a carriage, and, as may be seen, is cut so as to present the appearance of two arches in connection. The two figures



shown on the inside of the valance, in black, are to represent pieces of patent leather, nicely stitched with white thread ornamental figures, and sewed to the cloth ground or lining. In the sides of the top, patent leather, nicely stitched, supplies the place of lace. The cushion-fronts are designed to match, and are of the like material with the substitute for lace in the sides of the top. The body-linings are made from plush, profusely interwoven with flowers, which we have tried to imitate in our design.

FASHIONS IN TRIMMINGS.

POLITICS seems to have, at the present moment, absorbed the whole attention of the public, to the almost complete neglect of business. This, in a republic like ours, is to be expected about every four years. In consequence of this state in our affairs, we have very little to note in the changes of fashion as respects trimming since our reference to this subject in August last.

Buggies are principally trimmed with a fine description of corduroy, or cloth; the cloth with stitched facings of patent leather, and the corduroy in some instances having as a substitute for seaming laces a small cord, wrapped with a string and covered with patent leather, presenting, on a small scale, an appearance not unlike the wrapped seat-rail to the seat, illustrated on page 172 of our first volume. This makes a neat and durable finish, far preferable to woven laces, on the score of utility.

In some sections of this extensive country stitching in white is still practiced; for such we have continued up to the present time to give patterns; but, in New York work,

everything of the kind is about "played out." This is to be expected, as the public taste here demands richness in preference to a gaudiness in show.

The New York Coach-Maker's Magazine.

DECEMBER 1, 1860.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

BOUND VOLUMES *of this work are sold, singly, for* $3.50 *per vol., or Vols. I. and II., when purchased together, for* $6.50. *The two volumes, bound (including the subscription for the third year), will be furnished for* $9.50. *The three volumes, in numbers, will be sent for* $8, *when ordered. Single volumes, in numbers, will be sold for* $3, *or any single number for* 25 *cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for* 25 *cts.), can be had at this office for* 44 *cents. When mailed (the postage on which we prepay),* 55 *cents. Any volumes left with us will be bound for* 75 *cents each in our uniform style.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Nome-plates furnished to order, of different patterns, for from* $14 *to* $20 *per hundred, at this office, or sent according to directions, by express, payable on delivery; to which express charge must be added. Special attention is called to our* "GENERAL BUSINESS AGENCY," *advertised on another page.*

"M. L. S., of Va."—We have so often exposed the rascalities of the fellow to whom you and a great many carriage-makers have sent $3, and received nothing in return, that to do so again would be more than "a thrice told tale."

"S. & C., of Ind."—The "effusions" alluded to, we think highly of, but always exercise a liberal judgment in our estimate of the progress made in the art of carriage-making, where the same is pursued under difficulties.

"O. R. R., of Tenn."—The miscalled French Rule has already been published in the first and second volumes of this Magazine, to which you are referred.

"H. A. A. & Co., of Mo." write us, that they "have been in the carriage business for 15 years, and have felt greatly the need of such an agency as we advertise in the Magazine." The orders we daily receive assures us that there are many others who supply their "needs" through us, and find a saving in so doing.

"F. A., of C. W."—Your order is attended to. To secure the remaining numbers, requires another remittance. Read the terms on the first page of cover.

ROYALTY AND TOADYISM.

WE confess to being thoroughly American, both by birth and education, and therefore cannot view some things transpiring about us with such toady eyes as some would have us. A few days since Lord Renfrew, *alias* the Prince, having set his royal foot in Gotham, was afterwards *toted* through one of our most public thoroughfares in an American carriage, which was variously stated at the time as having cost ten hundred, and then twelve hundred dollars, both of which prices were fabulous, the true cost being only six hundred and fifty dollars. After being driven through the streets and thoroughly soiled with Royalty, the value of it suddenly went up to fifteen hundred dollars, at which price the owner refused to part with it,—so said the newspapers, and they, we know, *always tell the truth!* A week after, and these same authorities told us that on the 20th of October this same carriage was sold at auction by H. H. Leeds & Co., of this city, to Geo. F. Sherman, of Florence's Hotel, for $620. Two days after, in passing by this auction-mart in Nassau street, we saw this same carriage with a card reading thus: "At private sale. Inquire of H. H. Leeds & Co." The following day it had *run up* to 450 Broadway, and *run down* in price to $720, and no sale at that!—although emblazoned with the following advertisement in large letters: "This carriage used by H. R. H. the Prince of Wales, during his visit to this city;"—and it may remain there still for anything we know to the contrary.

Now, in view of the foregoing facts, we are justified in concluding that somebody has shamefully falsified the truth, or else Royalty has very suddenly fallen in the American market. Where's Barnum?

THE AXLE CONTROVERSY.

OUR readers will have noticed in the columns of this Magazine, during the past two months, several articles relating to the comparative value of wood and iron axles, copied from the *Boston Cultivator*, kindly furnished us by the publisher. This, in the language of the celebrated Sir Roger de Coverly, is "a subject on which much might be said on both sides," but, since the question has been so thoroughly discussed by the several writers, there is little left for us, other than to "sum up." We shall endeavor, in so doing, to study brevity.

The subject is presented to the public by Mr. Geo. B. Weaver, under the impression that, notwithstanding his previous impressions in favor of iron axles, wooden ones, after all, may be the best. In this state of mind, he proposes to have the matter scientifically investigated.

Mr. J. Stiles, Jr., a disciple of Vulcan, in his haste to settle the question, setting aside the scientific demonstration, comes at once to personal experience, and advocates the use of wooden axles, because iron axles are heavier. The only plea he finds for iron axles is, that they sell better (a strong reason), and the more iron there is, the better! Old-fogy like, he takes us back a century, and preaches that wooden axles with linch-pins are best for heavy loads. Unfortunately, although plausible, his reasoning will not bear the tests of scientific research. Science has clearly demonstrated that the smaller in circumference the shaft, the less friction will be found; and since an axle of iron two inches through is stronger than one of wood of the same thickness, the iron one has the two-fold advantages of lightness and strength. We concede that

wooden axles *may do* in country use, but when used in cities, on paved streets, they shake to pieces in a few weeks, from incessant vibration. Any carriage-maker of city experience can testify to these facts from observation.

Mr. Mears' assertion, that "an old, worn out, *unbroken* iron axle is worth more than a wooden one ever was," is decisive of his convictions; but Mr. Tarbell's investigation into the merits of the question on "scientific principles," settles the whole dispute. In a former age, when wood was plenty, and iron scarcer, and mind undeveloped, wooden axles were endurable; but the lights of science and practical utility have discovered that iron for axles possesses double the advantages of wood, even when not case-hardened; but when presented in the form of homogeneous steel, the advantages of wooden axles sink into insignificance in comparison with them. We commend the letter of Mr. Tarbell, on page 291 of the current volume, as worthy the perusal of any one who still entertains prejudices—inherited from primitive times—in favor of wooden axles. In our estimation, for carriage, or indeed any other axle, there is nothing else equal to the metal known as homogeneous steel, furnished by D. Littlejohn, 22 Cliff street, N. Y.

A VISIT TO JAMAICA, L. I.

Jamaica is a thriving inland town, upon Long Island, about twenty miles from New York City, and favored with four or five carriage shops. The largest is that of Mr. Jacob Smith, whose establishment has long been favorably known for good work. We are under many obligations to this gentleman for his kind attentions on this occasion, in showing us over his premises. We saw here as fine a lot of timber—hickory, oak, &c., as we have viewed for a long period. His gentlemanly journeyman, Mr. Wood, we found here on our visit four years ago, who has been there now about 20 years, with other familiar faces, showing that constant employment is given to worthy men and that a good understanding prevails between employer and employed. We are pleased to find that although business has been depressed in other localities, still Mr. Smith has found business very good the entire season.

We also called upon our friends, S. B. Crossman, F. G. Crossman, and G. M. Bennett, each of which are at the head of carriage manufactories in the place. All these gentlemen received us cordially, and what is of much importance to us, gave us their subscriptions to this Magazine. Here we were told a story of a perch-coupling speculator, which throws light upon the way in which some people do business, and may prove *instructive* to our readers.

It seems our hero was in the place on a tour of *observation*, and of course, in pursuit of *his* calling, he happened into one of the shops we have named, where he saw hung on the wall a pattern and description of a coupling bearing date some months earlier than his own, but which he said interfered with his patent, so with characteristic impudence and clambering over a pile of bodies and other obstructions, he tore the obnoxious placard down, declaring that it had no business there. This, in some cases, would have got the gentleman into trouble, but in this case the boss's good nature saved him the disagreeable consequences of a lock-up. From what we heard on this visit, *our* advice to the gentleman is, not to show his head there again, should he not fancy rough treatment, which we are assured he will get on a second visit. This advice would be equally advantageous if heeded in other localities, and is given *in friendship*, for the offender's benefit.

JANUARY SUBSCRIPTIONS.

Every January since this Magazine was started, we have found many who were desirous to have their subscriptions begin with the year. The first year we absolutely declined taking such patrons, because it made bad work with our volumes, leaving us with seven numbers on our hands as *dead* stock. But last year the numerous applications from such as were not particular to have a volume for binding, led us to yield to the demand from the public, and offer to take all such as choose to have the work for one year, commencing with the January number. A great many did so; and these are respectfully reminded that, with the receipt of this December issue, their subscriptions end, unless renewed. They are further informed that all such as would *now* desire to have the first seven numbers of the second volume to complete it for binding, will be accommodated on sending us $1.75, which can be done by mail, the change in stamps.

There are yet a great many who have not heretofore taken this work, and would, no doubt, like to commence with the year. We have made arrangements to meet the wishes of these, and the craft will confer a favor on us by reminding their shopmates of the fact, and persuading them to send along their names early. Believing that the craft generally are satisfied with our efforts to please, we confidently renew our requests to the great body of intellectual coach-makers throughout the country to aid us in our enterprise, by presenting the claims of the Magazine to their friends, and using their influence to induce them to subscribe.

In addition to the foregoing propositions, we are happy to state that we are able, with our large edition, still to supply all non-subscribers from the commencement of the third volume in June last; or with complete sets from the beginning of the publication in June, 1858.

THE "TAIL" OF THE PERCH-COUPLING.

WE have just received from a friend in Cincinnati the following paragraph, published in the *Cincinnati Daily Gazette*, of November 2, 1860:

"CIRCUIT COURT.—*Patent Coupling Case.*—The great case of Haussknecht against Claypool & Co., involving the validity of Haussknecht's re-issued patent for short turning in carriages, has been on trial in the Circuit Court of the United States for this District for twelve days past. The defendants did not deny the infringement, but denied that Haussknecht was the original and first inventor, and produced testimony tending to prove that the invention was known and used long prior to Haussknecht's invention. The jury yesterday morning rendered a verdict for the defendants. Lee & Fisher for plaintiff. Judge Coffin and C. B. Collier for defendants."

The *wonderful success* attending the labors of the self-called inventor, in his endeavors to establish the validity of his patent, may be summed up thus: He has brought some twenty suits in different parts of the country. The first *success* was in Hartford, Ct. Haussknecht *v.* Fred. Wood. Prosecutor did not appear, and consequently he was non-suited. . The next we hear of it is in New Orleans, where N. T. Edson, as the owner of the patent there, sued Dr. Thos. Hunt. See, on page 58 of this volume, where the verdict is for the defendant. The last act in the drama has just been closed in Cincinnati, as given above. A lawyer here informs us that he has some fifteen cases to defend, but none have yet been suffered to come to trial. We ourselves were sued for publishing a letter sent us by a correspondent more than a year ago; and, in defending this, the whole question of the validity will again come up, the result of which (if ever tried) will be minutely given in our pages by illustrations and documents which will astonish our readers. We have been informed that the patentee has industriously circulated the report that we had offered to settle with him. We pronounce the assertion false, for *we* have never offered him one cent to settle, intending to let the court settle this matter.

EDITORIAL CHIPS AND SHAVINGS.

A "TRAIN" OF FOREIGN CARRIAGES.—About one year ago there was raised a great cry in the newspapers for some cheaper mode of conveyance in cities than was supplied by our city "hacks." No American at home having responded to the call, we are now advised that George F. Train will soon introduce an English "institution," the Hansom Cab, to the New York public, for patronage. There are six of these cabs, named respectively the Astor, St. Nicholas, Fifth Avenue, Metropolitan, New York, and Everett. Our neighbor, *Vanity Fair*, says when he heard how well we are to be accommodated with cheap conveyances, he "threw himself into violent expenses," and thinks that "when the reader learns that a new stool and two postage stamps will be included among the decorations [of *Vanity's* office] he may form some idea of the splendor" of the reception he intends for Train. For our part, *we don't believe these English Hansoms will take*—but we shall see.

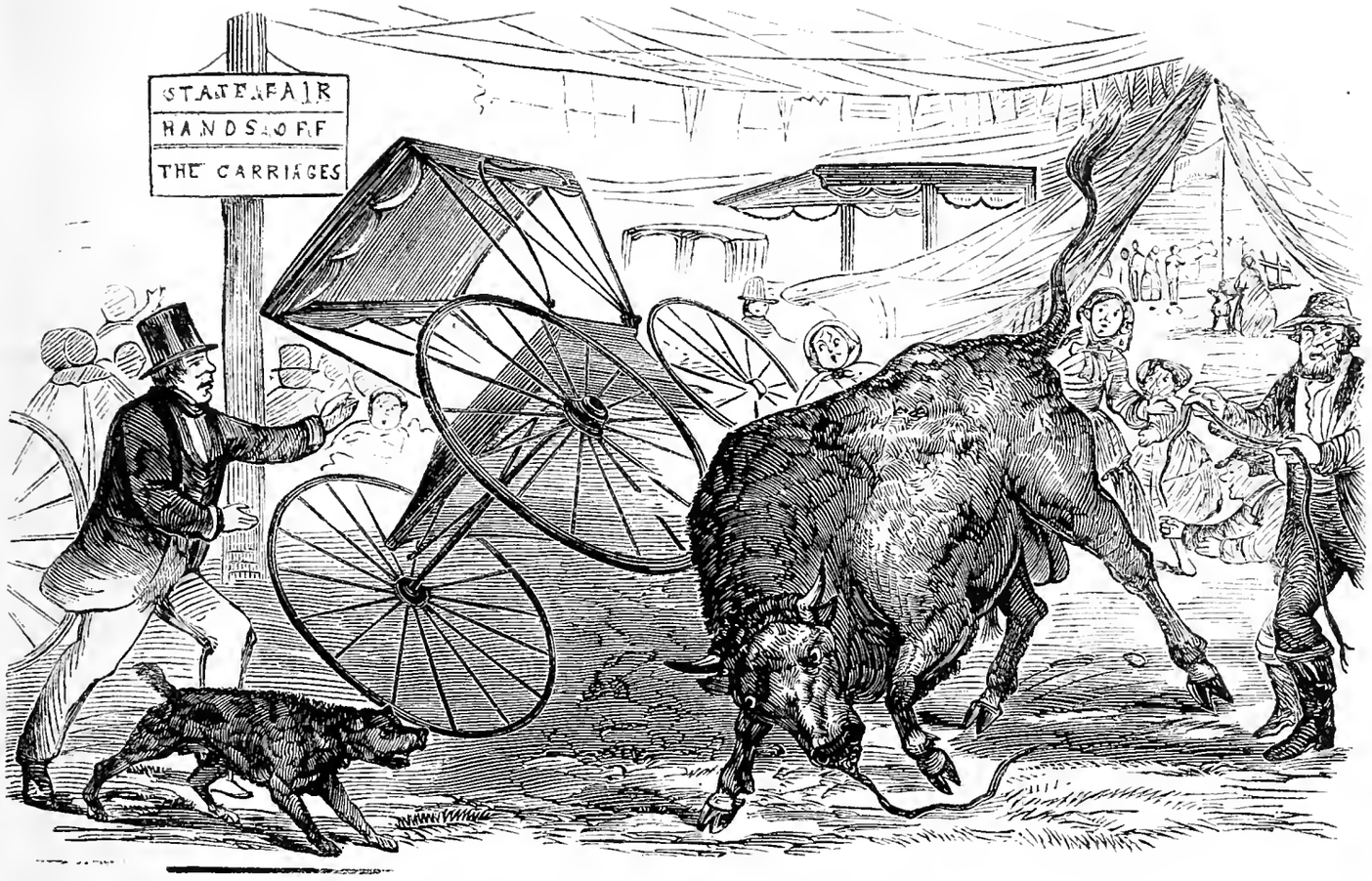
A WAGON WITH LEGS!—We are informed by a correspondent in California, that Mr. J. T. Overton, of Santa Clara County, has just invented a steam road-wagon, a working model of which was exhibited at a late fair held in San Francisco. Ever since the time of Taylor, the water Poet, "the world (of carriages) has run on wheels," but from the signs of the times, matters are about to be reversed. The new "What is it?" has four pair of legs (!) jointed exactly like the limbs of a horse, and when the *wagon* is in motion these move precisely like the legs of the living animal, except that they are reversed. An alcohol lamp supplies the motive power, sending the machine with rapidity around the exhibition hall, with a wagon attached to it, in which are seated two stout men. When the inventor's "dreams" become "real facts," what effect will it have on horse flesh?

FOUL AIR IN WORKSHOPS.—At this season of the year, when fires become necessary and every door and window is closed to exclude the cold without, the health of workmen must suffer more or less. This will be the case more particularly among blacksmiths and painters. These—the paint shop more seriously—yield emenations of an unhealthy kind, that lower the circulation of the blood, thus causing an increased sensitiveness to the cold on exposure to the atmosphere. The foul air within tends to produce headaches, debility, languor, palor of the face, redness of the nose, loss of appetite, and other diseases, all certain warnings that more ventilation is needed, and which, if not attended to, will result in sickness—death. We hope this matter will receive the careful attention of employers.

GEN. JACKSON'S COACH.—About thirty years ago, a few admiring friends presented the then President with a new coach, made at Middletown, Conn. The original price paid for it was $1,000. That same coach, "a little the worse for wear," was recently sold for $16.50, a new proof that the value of popularity and coaches depreciate with age!

A NEW WONDER.—A common-road carriage, propelled by neither steam nor gas, nor any other combustible thing, but by the simplest mechanical arrangement imaginable, was lately seen in the streets of Paris, going with such swiftness as to outstrip the four-in-hand carriages that attempted to compete with it.

STAGEING IN WASHINGTON TERRITORY.—Stages, like the Indians, are all *driven* "out West." On the 15th of August the first through mail stage from California to Oregon and Puget Sound left Sacramento. Stages already are running between Jacksonville and Yreka.



A SKETCH FROM THE SPUTTERBURG AGRICULTURAL FAIR.

LETTER FROM OUR SPECIAL CORRESPONDENT.

SPUTTERBURG, Oct. 10, 1860.

DEAR MR. EDITOR:—A great many fairs have this season been held in different sections of the Land-of-the-Free, but none of your correspondents seem to have favored you with any account of their proceedings. Whether this arises from want of public interest in them, because of absence of novelty, or from other causes, I am unable to say; but I shall like to see the spell broken, and I will endeavor to do it by giving you some account of *our* "show" in Sputterburg.

For several weeks previous to the fair the local papers, posts, fences, and other available mediums of publication had been monopolized to give *eclat* to the show, and it was announced, among other curiosities, that Messrs. Wagonseller & Co., Messrs. Hubbs & Co., and other distinguished Sputterite carriage-builders would exhibit their productions, and contend for the medal.

This, Mr. Editor, had been advertised as an Agricultural Fair, but, from some cause or other, these rural managers *manage* to grace their shows, invariably, with more or less mechanical "traps." Notwithstanding the timely warning given by Mr. Tinker "to all the world and the rest of mankind," in your columns last year, that these Fairs "are bad places for exhibiting carriage-work,"* still the warning was not heeded, and the carriages were there. Everything seemed to be going on favorable—for the managers, until the last day of the exhibition, when about the hour that every exhibitor expected to hear himself awarded a medal (O, horror!) who should, unbidden, rush in among the judges while at their *impartial* labors, but farmer Seare'em's premium "critter," and with impartial *decision* decided matters summarily, as I have endeavored to show in the sketch I send you. Would you credit it, Mr. Editor! this is the first Fair where *reward* has been so impartially administered! Hoping, for the honor of human nature, that our judges will learn a lesson of impartiality in these matters, and hereafter distribute their awards more in accordance with merit, I subscribe myself,

Yours, faithfully,

TIMOTHY CENSOR.

* See page 176, Vol. II.

LETTER FROM TEXAS.

SOUTHLAND, TEXAS, Oct. 5th, 1860.

MR. E. M. STRATTON.—*Dear Sir*: We, being located in a place where it is difficult to get material shipped to us, have been for the last two years bending our own felly-timber, but we find it difficult to bend sawed stuff which is more than one and a half inches in thickness. We have come to the conclusion that there is a secret in the matter that we are not in possession of—about the steaming of the timber. We would like to have some information as to the time it should be steaming, and whether the timber should be heated slowly or quickly.

If you can give us any light upon this subject through your Magazine, or privately, we will thankfully receive it.

Sir, we have received three numbers of your Magazine, and are well pleased with it. We believe it worthy the patronage of all engaged in the line of business on which it treats, and we can assure you that it would have saved to us a great many dollars which we have spent, could we have obtained the information it imparts during the past five years.

We have some inventions of our own which attracts the eyes of our customers, and which we will send for the use of the Magazine, as soon as we can get them in the proper shape. We think they will be of considerable use to the craft. We feel a great interest in the welfare of the Magazine, and as it is in its infancy, and one of the first enterprises of the day, anything that we may have in the future which we think will be of any interest to the craft, or use to the Magazine, shall be at your service.

Yours, truly, A. B. & E. D. JONES.

[Any correspondent who may be in possession of the knowledge asked for will oblige us by communicating the same.—ED.]

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

[Reported expressly for the New York Coach-maker's Magazine.]

AMERICAN PATENTED INVENTIONS.

*** TO INVENTORS.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

Sept. 11. IMPROVEMENT IN TIGHTENING TIRES ON WHEELS.—Everett Bass, of Calhoun County, Ga.: I claim the arrangement of the clasp, H, slips, X, key, F, plate-bolt head, B, and inner plate, S, when used for the purposes described.

IMPROVEMENT IN SELF-DETACHABLE WHIFFLETREES FOR CARRIAGES.—M. C. Chamberlin, of Johnsonsburg, N. Y.: I claim the combination of the bell cranks, *a a*, with the rods, *d d*, and the sleeve, *c*, when the same are used substantially as and for the purposes specified.

IMPROVED SAW CLAMP.:—J. H. Dunbar, of Plymouth, Conn.: I claim an improved article of manufacture, viz.: the slotted jaws, *a*, fulcrum pin or bolt, *d*, having the collar, *e*, nut, *g*, in combination with the lever-cam, *i*, substantially as and for the purpose described.

IMPROVED MACHINE FOR BENDING WOOD.—A. P. Spaulding and Elisha Pierce, of Westminster, Mass.: We claim the combination and arrangement of the vises, U U, or their equivalents, with the bearing strip, T, of the mechanism for holding and bending the wood, as specified.

IMPROVEMENT IN SPRING DIVIDERS.—J. W. Strange, of Bangor, Me.: I claim the combination and arrangement of the sliding yoke, T, and the screw, S, when applied to calipers and dividers, substantially as described and for the purpose set forth.

Sept. 18. IMPROVED MODE OF ATTACHING HORSES TO CARRIAGES.—Austin Avery, of South Windham, Conn.: I claim the metal tubular, A, constructed substantially as described, and furnished with a spring latch, *b*, and slotted hooks, *a a*, for receiving the T heads of the shafts and loops. E, for receiving the tug and belly-band straps, as described.

IMPROVED HAMES FOR HORSE COLLARS.—Martin Drew, of St. Paul, Minn.: I claim the combination of the extension hames produced by the slides, B, with the variable tug attachment (so as to change the draught to suit the size of the horse) formed by the notched or bent staples, E, as and for the purpose set forth.

IMPROVED SPOKE-SHAVE.—Samuel Leonard, of Mass.: I claim an improved arrangement of the adjustable mouth-piece and its operative mechanism with respect to the stock, and the cutter arranged in the stock as specified.

IMPROVED HARNESS SNAP-HOOK.—John North, of Middletown, Conn.: I claim a snap-hook in which the eye is made in one piece with the tongue, and has a position relative to the bearing point of the hook, or that point in which a ring rests, substantially such as is before described.

Sept. 25. IMPROVED CARRIAGE-JACK.—J. Card, of Cleveland, O.: I claim the special arrangement of the wheel, A, lever, E, and foot-piece, D, operating as and for the purpose set forth.

Oct. 2. IMPROVEMENT IN WAGON WRENCHES.—P. D. Van Hoesen, of New York City: I claim, first—The arrangement of the revolving head, A, provided with holes, *b*, of different sizes, in combination with the rotary handles, D, constructed and operating substantially as and for the purpose specified.

Second—The combination with the revolving head, A, and handle or supporter, E, constructed and operating substantially as and for the purpose set forth. [If we mistake not, this wrench will prove itself to be a very useful article to the carriage-maker.]

Oct. 9. IMPROVED PAINT-CAN.—W. L. Gilroy, of Philadelphia, Pa.: I claim constructing the upper end of the body of the vessel, A, with the wired boundary edge or rim, *d*, and the inner bead, *f*, substantially in the manner and for the purpose set forth and described.

IMPROVED CARRIAGE-JACK.—J. J. Pike, of Chelsea, Mass.: I claim my improved carriage-jack as constructed with the extra bearing-lever, C, combined and arranged with the lifting-lever, B, and the supporting frame, A, substantially in the manner and so as to operate as described.

And I also claim the combination and arrangement of the two spring stopping levers, *k*, *l*, and the pin, *p*, with the levers B and C, applied with the frame, A, and with respect to one another as specified.

Oct. 16. IMPROVEMENT IN SHRINKING TIRES.—A. P. Cassel, of Nataga, Ill.: I claim the arrangement of the adjustable bars, F A, and dogs, H H, with the curved bar, A, jointed bars, B B′, slide, D, spring, E, and eccentric, C, as and for the purposes shown and described.

METALLIC HUBS FOR CARRIAGE-WHEELS.—N. T. Edson, of New Orleans, La.: I claim so constructing the two metallic flanches, C and B, which are provided with grooves, A A A, and projections as represented, so that they will clamp and hold the spokes separate and distinct from each other on their edges, while they are allowed to bear and press against each other on their faces, forming a wheel of dodged spokes, substantially as and for the purpose specified.

RECENT EUROPEAN PATENTED INVENTIONS.

May 17. Marc A. F. Mennons, Rue de l'Echiquier, Paris—An improved carriage-brake or drag.

June 12. Alfred V. Newton, Chancery Lane, London—An improved carriage ventilator.

16. Charles Coates, Sunnyside, near Rawtenstall, Lancashire—Improvements in the construction of brakes for carriages.

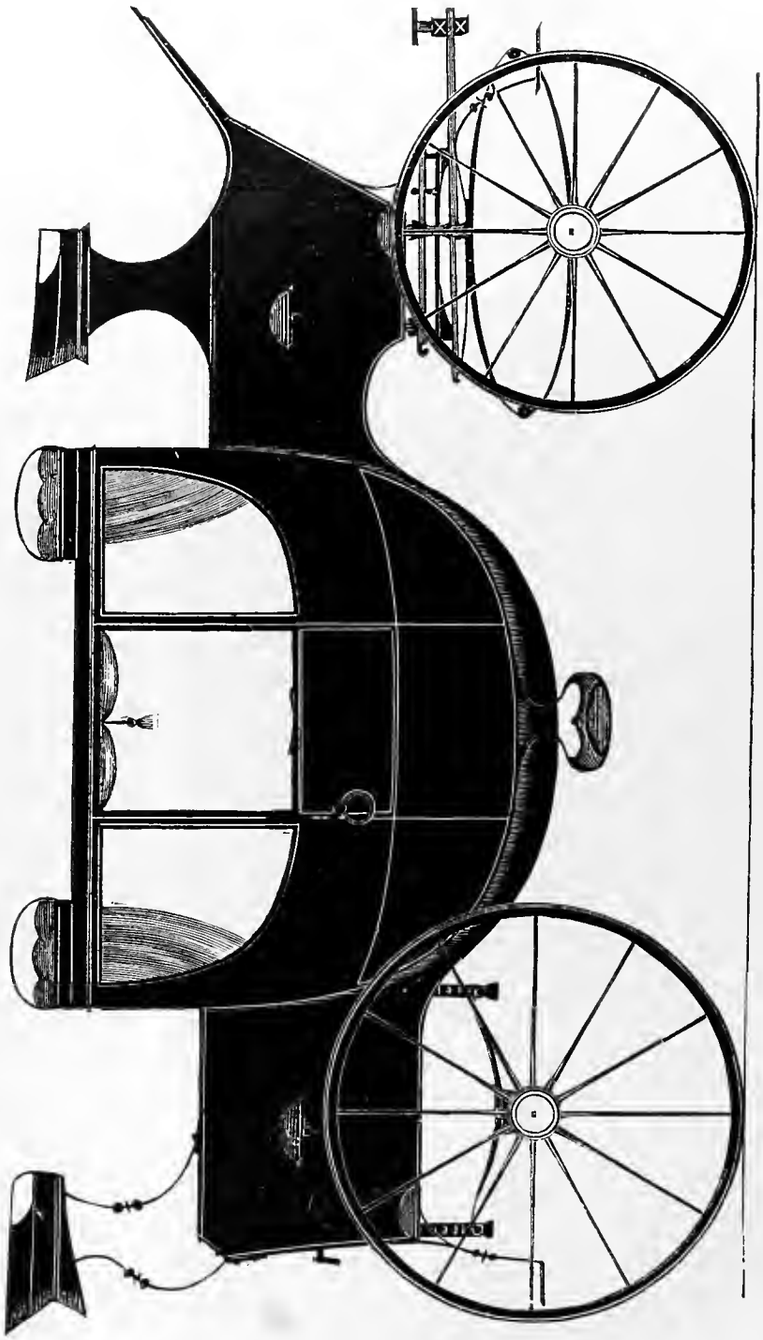
22. James Taylor, Birkenhead—Improvements in locomotive engines and wheel carriages.

July 11. Robert Walker, Glasgow, Lanarkshire—Improvements applicable to horse bits.

20. Joseph Dickinson, Pendleton, near Manchester, Lancashire—Improvements in machinery for retarding or stopping railway or other carriages, and for other purposes where brakes are applicable.

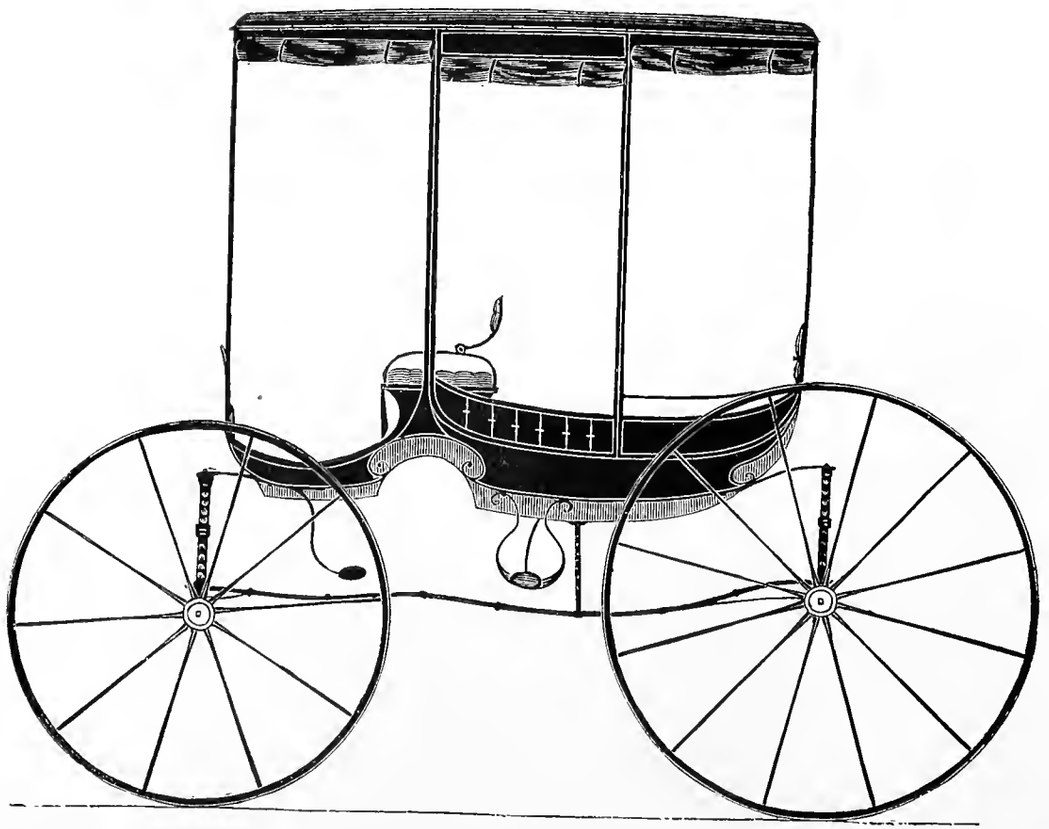
24. Rebecca Thomas, Bath street, Tabernacle square, London—Improvements in the tires of wheels for vehicles used on common roads.

25. Montague F. Leverson, Saint Helen's Place, London—Improvements in applying springs to locomotive engines, and to railway and other carriages.



FOUR-HORSE SPORTING DRAG.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 149.

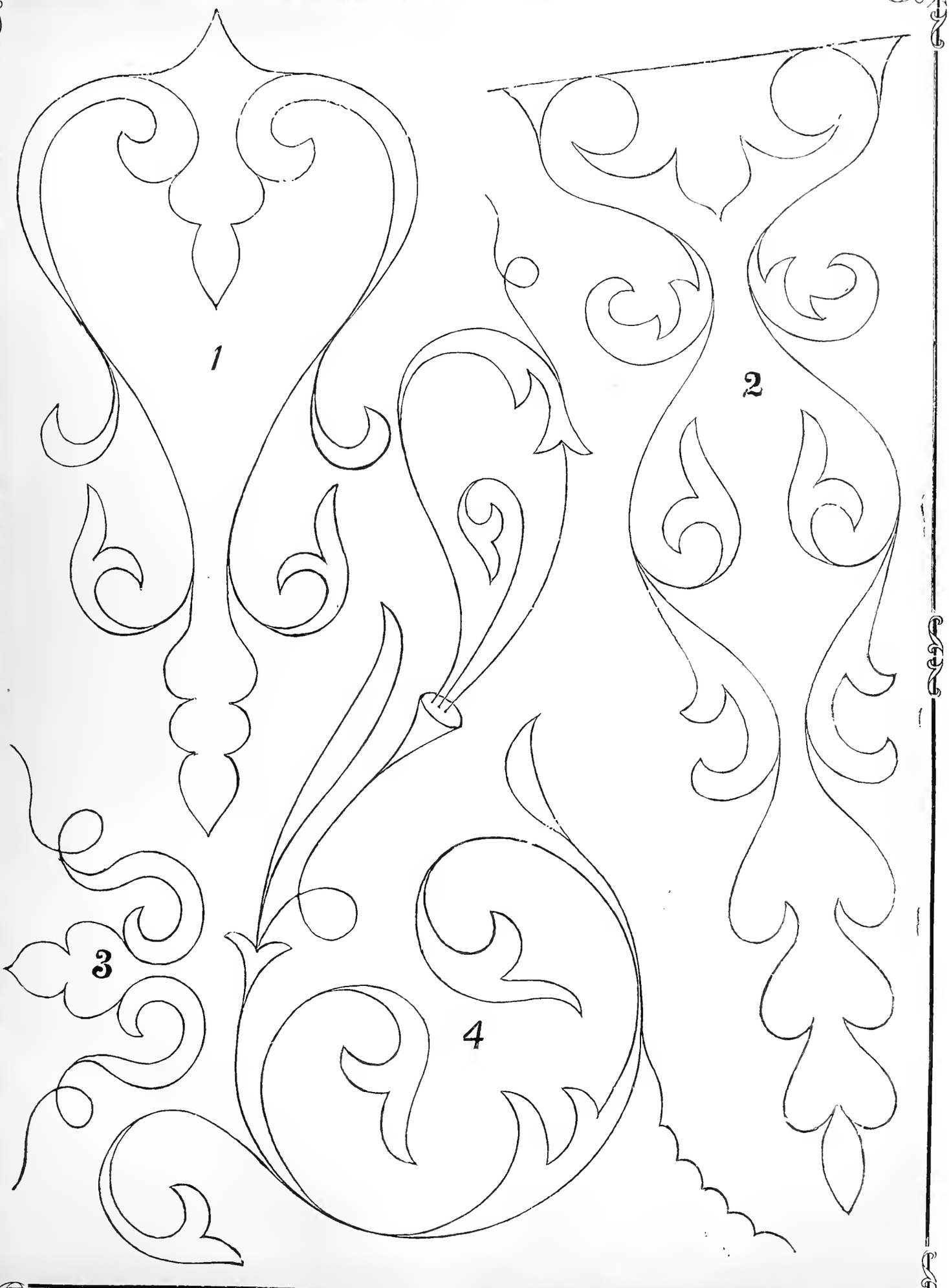


JAMAICA ROCKAWAY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 149.

BRACKET-FRONT BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 149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THE NEW YORK
COACH-MAKER'S MAGAZINE

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, JANUARY, 1861. No 8.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

VI.

I FOUND the Professor in capital spirits, and I soon partook of his humor in part, after joining him. As everything was in readiness, he mounted his small Indian pony, and away we started for Burlington. I have said the day was beautiful. The south wind, warm and balmy, seemed to bear the rich perfumes of orange groves to us on its invisible wings, while the elm buds were already bursting in tiny leaves, and the gay squirrels gamboled merrily amid the long branches. Our horses seemed infused with new life, and we galloped rapidly through the groves and over the prairies, now conversing gayly together about our prospects ahead, or speaking more seriously of the many friends whom we had but just left.

Reaching the river before sundown, we crossed over and put up at the best hotel. After tea we called on some acquaintances, and passed a very social evening, which we enjoyed *hugely*, as it was perhaps the last opportunity we would have for months, perhaps years.

The next morning, after making a few purchases, we started out, and now we were fairly upon our journey. Our appearance deserves a passing notice.

The Professor, to my eye, cut rather a comical figure, as mounted on his little pony, his legs nearly reaching the ground, while a great bundle of clothing was rolled up like a huge knapsack behind his saddle. As my horse was the largest and strongest, I carried our two carpet-sacks, tied together and strung across my saddle like a pair of saddle-bags, or peddler's panniers. A rifle rested on my shoulder, and a bowie-knife was securely fastened to a belt buckled around me, while the silver mountings of a "Colt" protruded from the Professor's coat pocket Besides these, we were well provided with pipes and tobacco, and, thus equipped, we were ready to meet friend or foe.

Nothing transpired of sufficient interest to demand attention until we reached the center of Iowa. Broad, rolling prairies surrounded us on every side, over which we rode as rapidly as possible, occasionally crossing small streams with narrow belts of stunted timber along their banks, which served to relieve the otherwise dreary monotony of the scenery. It was but seldom that we obtained a glimpse of the sun, for clouds were continually passing over us, discharging their contents in copious showers, usually attended with heavy winds, thunder, and lightning. But amid all this, unpleasant and disagreeable as it was, we managed to keep in the best of humor.

It was near the close of a dreary day, and we were riding over a high, broken prairie, without a sign of civilization to greet the longing vision. A heavy shower had just passed over, soaking us thoroughly, and then, as though to atone in part for the mischief, the clouds broke away, while the sun shone out bright and beautiful. We were busily discussing the comforts of a hospitable dwelling, with a blazing fire, and a cheerful cup of tea, interspersed with many doubtful surmises as to our enjoying them that night, when, on gaining the top of a high ridge, we discovered what appeared to be the tops of trees in a low ravine far ahead of us, while rising far above them, reflecting against the red sky, a column of smoke was plainly visible. The sight, associated as it was with all the comforts above noticed, inspired us with renewed energy, and, dashing on as rapidly as possible, we soon reached a high bluff bank, whereupon, halting for a few moments, we surveyed the scene before us. Down below, near two hundred feet, Grand River, swollen by the recent rains to a fearful height, swept by with a ceaseless roar; while beyond it the low bottom stretched away a mile or so, and a little way up the opposite bluff we could dimly see, through the as yet almost leafless trees, the dim outlines of a comfortable cabin. Above the roar of the waters we could hear the lowing of the cattle, and the shouts of boys engaged in their evening's work, besides the clear, shrill cackling of the fowls as they flew up on the low branches to roost. All these familiar sounds were very agreeable to our ears, but serious obstacles were to be overcome ere we could enjoy the comforts of that cabin. Following a rough road that wound down a steep ravine, we finally reached the river bank, when a sight presented itself that would have made the stoutest heart tremble. The banks were full, and the mad torrent dashed

by, carrying large branches, and sometimes whole trees, on its bosom. We stood and surveyed it in silence for a moment, but no time was to be lost in idleness, for the sun had already sunk behind the opposite bluffs, and the stream must be crossed to insure a comfortable night's rest, therefore we busily commenced making arrangements to cross over. As we had learned by past experience that my horse was sure-footed and a good swimmer, it was decided that I should go over first. Placing the carpet-sacks across my shoulder, I rode in. The water came up to the skirts of the saddle a few feet from shore, and, taking advantage of the depth, I rode up several yards, then turning, guided my horse towards the opposite bank, with his head inclined up stream slightly, so as to counteract the strength of the current. Proceeding very slowly, the water grew deeper and deeper, until we reached the channel, when the noble animal gave a desperate plunge and swam across in safety. The current carried us down opposite the road cut in the bank, up which we scrambled, when I sent up a shout of triumph at my successful exit, which was answered by the Professor, who struck the spurs in his pony's side and dashed fearlessly in the roaring torrent. Going up a suitable distance, he turned to cross over, but, as his animal was very low, they had not proceeded far ere it became too deep to wade. Right nobly did the little animal dash in, and swimming vigorously, the channel was soon reached, with a fair prospect of a successful passage, when, but just above them, the black roots of a sycamore rose up out of the water as the trunk revolved by the action of the current. I had been watching them with some anxiety—the gallant pony, with his head alone out of the water, while from his nostrils the heavy breath made the dark waves boil before him; and the Professor, with a good-natured smile resting pleasantly on his face, and so intent, too, on his passage, that he had failed to notice the approaching monster. Giving utterance to a cry of warning, I sprang from my horse, but it was too late; an immense root struck the pony directly on the head, and both disappeared beneath the boiling waves, while the sycamore trunk floated majestically over them. Rushing down to the water's edge, I arrived just in time to see the Professor's head appear above the surface, and after blowing the water from his mouth and taking breath, he struck out desperately for the shore. But this was by no means an easy task, for, as the river at this point was narrow, the current was very strong, and he was carried some distance down stream before he reached the bank, when, climbing up on *terra firma*, he shook the water from his person, and at the same time coolly remarked, "Well, this is *very* romantic, I must confess;" and he sat down on a log near by to rest.

In the meantime, I ran down the bank to see the fate of the pony. I saw him rise to the surface; then sink; then rise again, and make a few efforts to swim, but they appeared more like death-struggles, and ere long they ceased altogether. The root had apparently stunned him, and the water soon did the rest, and a mile below the ford the current washed his lifeless body up on a great pile of drift-wood. In a few minutes the Professor came up, and learning the state of affairs at a single glance, he proceeded up the bank a few rods, threw off his coat and boots, then, diving boldly in the stream, swam out to the drift. Taking off the saddle and bridle, he returned to the shore bearing them with him. Assisting him to reach the bank, he coolly remarked, "So much saved from the wreck;" and then we returned to the ford. As my partner had lost his hat in crossing, he rumaged over his carpet-sack until he found a cap, when, throwing the baggage on my horse, I led him by the halter, while the Professor followed, with his saddle and bridle slung over his shoulder. We had proceeded but a short distance ere he commenced singing, in his happiest manner, the popular ballad called "Johnny Sands." Although I felt rather sad over the occurrences of the past hour, yet I could not refrain a smile as he sung the verse describing the manner in which Mrs. Sands took a cold bath, when she attempted to rid herself of her lord by drowning. Reaching the cabin, we met with a warm welcome, and all our visions of the afternoon were fully realized. After the Professor changed his clothing, we sat down by a blazing fire to dry and warm ourselves. The family consisted of the "old folks" and three small children, besides a fair young girl of eighteen or thereabouts. The cabin was small, containing only one room, yet everything was neat and clean. Supper was soon announced, to which we done ample justice. Excellent wheat bread, *almost* equal to the "light brown loaf" of the far-famed New-England housewife; superior corn bread, light and puffy; mashed potatoes, golden butter, sweet milk, and finely flavored tea, besides a loaf of poundcake, which last is a rarity in "ye far West." Of course we left the table refreshed in body and mind after such a repast, when, lighting our meerschaums, we sat down by the fire to enjoy our extra "fine cut." We soon found the family were intelligent and agreeable in their manners, giving unmistakable evidence that the parents at least had been brought up in the more refined circles of society towards the rising sun. Now, the Professor is emphatically a lady's man, and after our fair young hostess had cleared away the remnants of our feast, and sat down with her knitting, he commenced conversing with her, while I done all I could to entertain the old folks with my poor remarks. "Fine girl," said the Professor, when we went out to see that our horse was all right previous to retiring; "fine girl; but say, where are we going to sleep to-night?" This was his first trip among the rural denizens of the West, and I smiled, as I answered, "They will find a place somewhere, depend on it. Custom creates the standard of modesty in such cases." "But you don't pretend to say that we will all sleep in that one room!" returned he, in a tone indicating some amazement. "Certainly," I answered, as we entered the house. During our absence an extra bed had been made up on the floor. Two beds occupied one side of the room, one of which was already occupied by the old folks, and the young lady informed us that when we wished to retire we could occupy the remaining one. As I was very tired, I immediately commenced making preparations, but the Professor was somewhat slower in his movements, and when fairly in bed, I watched him closely, expecting to have some sport at his expense. He manifested more coolness and deliberation, however, than I expected, but the cause was soon made manifest, for, anticipating such a dilemma, he had put on an *extra pair of pants*, which answered for drawers.

After an early breakfast the following morning, we disposed of the saddle and bridle for half its real value, and then started off, taking turns in riding and walking. The country became wilder as we proceeded westward. Some days we would pass but one or two rough squatter's cabins, and when night came on, if we could find no hospitable roof to shelter us, we would halt on the banks of

some stream, and build a fire beneath the thick-leaved branches of a maple or oak, and wrapping ourselves up in our blankets, we would sleep as soundly as though reclining on feathers in the St. Nicholas.

Finally we reached the Missouri, and, taking a seat on the flowery banks that rose high above the boiling current, we commenced questioning each other as to the best course to pursue. Where were we going? That was a question we had never fully decided upon, and, after saying a good deal on the subject, the Professor spoke as follows:—

"Owing to misfortunes and high bluffs along the route, I am nearly run out of funds, and as you say you are in the same *unenviable* condition, I propose we go up and pass a day or two among the Indians, so that we may learn how they live in their natural state, then, returning to the river, we will endeavor to get a situation of some kind."

The proposition suited me, therefore I assented thereto, and crossing the Missouri, we proceeded up Platte River to a Pawnee encampment, situated some fifty miles from its mouth. Arriving at the village just before sundown, we were met by a brawny savage, who greeted us with every mark of joy and respect. Conducting us to the center of the encampment, we were soon surrounded by a crowd of men, women and children, all of whom shook hands and gave utterance, in a sort of grunting gutteral, to the single word, "How," meaning "How do you do?" After getting through with this exercise—not a slight one by any means—the chief of the tribe advanced, and addressing us in broken English, invited us to tarry with him over night. We accepted the invitation, and giving our horse to a young brave for safe keeping, we followed our stately host into a large bark cabin. A cheerful fire was blazing in the center—for the evening was cool—and taking a seat near it, I commenced talking to the chief, at the same time surveying him carefully. He was over six feet high, with broad shoulders; long, black, coarse hair; small, deep-set eyes; large nose and mouth, and high cheek-bones. During our remarks he uttered a few words in French, which the quick ear of the Professor detected, and, turning towards him, he commenced a conversation in that jaw-breaking vernacular, both of them speaking it fluently. They were soon interrupted, however, by a dirty-looking squaw taking a pot from the fire, and telling her liege lord that supper was ready, or something to the same effect, as I supposed from the fact that he told us to sit up and help ourselves. As we heartily indorsed the old maxim, "When in Rome do as Romans do," we helped complete the circle around the afore-mentioned pot, and patiently waited for operations to commence. The chief grasped a wooden spoon, and dipping in the pot, brought out a curious-looking compound—a sort of mongrel hominy—and, after tasting it, the vessel was passed round. Helping ourselves, we followed his example by taking a small mouthful just to test its good qualities. It tasted—well, of all the different dishes we ever ate, and they are many, cooked in whatever style they might be, none would compare with this. For the sake of good manners we managed to get down a small quantity, by swallowing three or four times at each mouthful. When the meal was finished, the peace-pipe was lighted and passed round, each person taking one whiff, commencing with the chief, and then we filled our respective pipes with pure killickinnick, and puffed away with great gusto. When the hour for retiring arrived, we were carefully stowed away in an excellent bed, composed of Buffalo robes, but, owing to the novelty of our situation, we slept but little.

Morning dawned clear and beautiful. The forenoon was passed in riding with the young braves over the prairie near by, and in listening to their stories of wild adventure when out on their autumnal hunt after buffaloes. When dinner was dispatched, the Professor, who ever has an eye to business, tried to trade a few trinkets he had in his possession for war-clubs, necklaces, and pipes. While engaged in this traffic, a young Indian rode up, mounted on a fine iron-gray pony. "What will you sell him for!" asked the Professor. "One hundred dollars," was the reply. After musing for a moment, he drew a handful of silver from his pocket, and holding it up, said, "I'll give you all this for it." The dusky young warrior eyed it wishfully for a time, then springing from his horse, cried, "Take 'em along; me no want 'em."

Half wild with delight at this unexpected good fortune, the Professor grasped the bridle, and springing in the rough wooden saddle, dashed through the encampment, causing gaping squaws and lazy children to exercise their powers of locomotion to considerable extent in order to get out of his way. About the middle of the afternoon, after again smoking the great peace-pipe, and shaking hands with every one in the village, we took our departure.

"Ha! ha!" laughed the Professor, in his gayest mood, when we had fairly left them. "Rather a good joke, this, ain't it?—only cost me about five dollars," and he eyed the noble little animal with a look of mingled pride and satisfaction.

Riding down the river some fifteen miles to the mouth of Salt Creek, we camped for the night. Securing our horses by means of ropes attached to stakes, so that they could feed on the luxuriant grass during the night, I built a fire, while the Professor took his lines and went down to the creek. In half an hour he returned with several good-sized catfish, which we dressed and fried in regular backwood's style. Perhaps they were not cooked in a manner pleasing to the dainty appetite of the city epicure, yet we enjoyed them finely, which is not to be wondered at, however, when we take into consideration our living for the past two days.

After providing enough wood for the night, we spread one of our blankets near the fire, reserving the second for covering, while our carpet-sacks served for pillows. Filling our pipes and lighting them, we sat down to muse away an hour or two ere trying to sleep. It was a lovely evening; not a cloud could be seen in the vaulted sky above us, but the unfathomable depths mirrored back their indescribable hues, grand, beautiful, and mysterious to one who loves the sublimity of nature. The sun, already lost to view, reflected a sea of golden billows extending far up toward the zenith, while away off in the east a single star glimmered faintly, as though half fearful to reveal its bright form to mortal eyes. Never before had I *felt* the beauty of poor Clarke's immortal lines—

> "Now twilight lets her curtain down
> And pins it with a star."

Anon, and the golden sea in the west changed to a silvery lake, bespangled all over with diamond lights; and then the low chirp of the wild crickets near by, and the hoarse croaking of frogs in the distance broke in upon the deep, almost solemn silence of the hour. By and by,

the shadows gathered thickly,—shutting us in from all the world as it were, and binding us with the chains of darkness. During all these changes we had smoked our pipes in silence, each one occupied with his own unutterable thoughts. Is it strange that I thought of friends far away of home, and all the loved ones who render that spot more sacred than aught else of earth?—and then I thought of those with whom I had but just parted, and I wondered if those friends,—perhaps it would be nearer the truth to say if *one* friend, was thinking of me at that calm and silent hour. It was just the time when we used to take an evening walk together, or, seated on the verandah, converse with the sweet familiarity of very dear friends. But was I not going to forget all this, thought I, yet here I am hugging the deceitful phantom to my bosom, and experiencing actual pleasure in the deed. I roused myself at the thought, and, turning towards the Professor, said, "This is what might be called romantic."

"Yes, and very truthfully, too," he answered. "My feelings are indescribable when I reflect on our situation. One feels very different when relating an adventure from what he does when experiencing it. Here we are, on the western bank of the wild Missouri, out of the States, in fact, in a vast wilderness, while our nearest neighbors are the Red-skins, of whom we used to read such horrid tales,—the "veriest devils" of our boyhood. Such a feeling of solitude I have never before experienced; in truth, I have never known what solitude was till now."

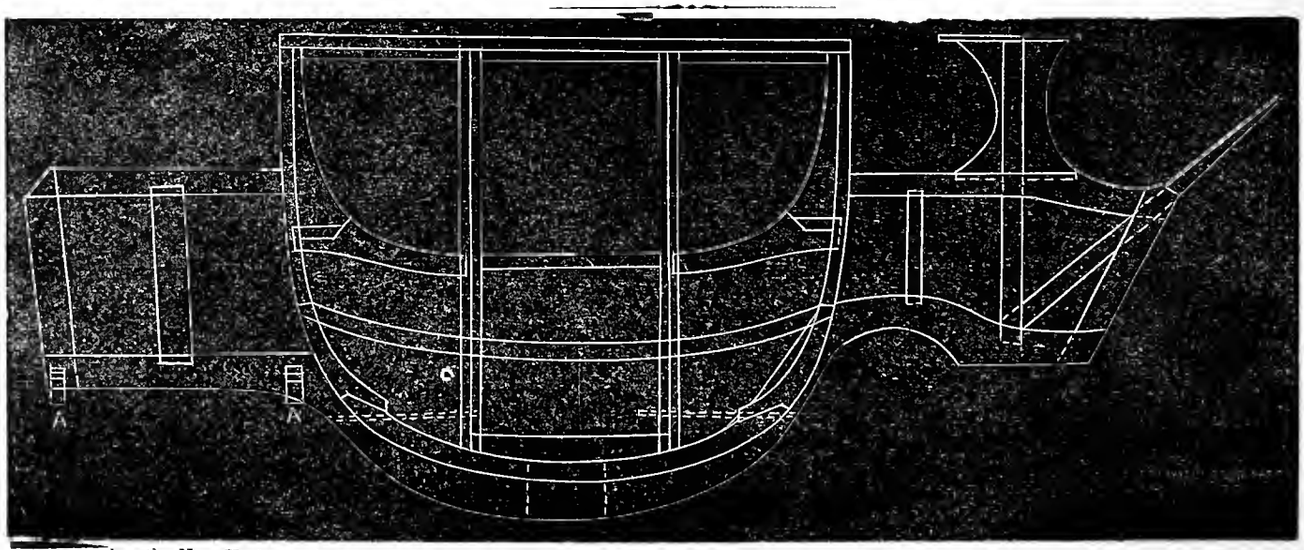
"I can say the same," replied I; "I feel sad and gloomy, with an ill-defined, mysterious feeling of fear mixed in for variety. I should not be surprised if it rained before morning." And I pointed to a dark cloud that skirted the western horizon.

"It certainly looks like it," returned the Professor, as he stowed himself away between the blankets. In a short time his deep, regular breathing told me that he was oblivious to all things pertaining to this mundane sphere.

As for myself, I could not fall asleep thus readily. Our situation was too novel to admit of it. Thought coursed rapidly through my mind, clear and fearfully distinct at first, then more confused, and finally, after watching the dark cloud in the west as it rose up slowly, I fell into a troubled doze. I must have slept near two hours, for it was about midnight when I was awakened suddenly by a loud noise, apparently close by. I sprung up in a sitting posture, and listened attentively. The low, rumbling echo of a thunder-clap rolled slowly along the heavily-timbered bottom on the opposite side of the river, and revealed the cause of my alarm. The cloud had nearly covered the sky, while a few drops of rain falling at irregular intervals gave warning of the approaching storm. The sharp howl of the wolves echoed dismally down in the deep ravines; and almost directly over us, mounted on the dead top of a towering cottonwood, an owl sent forth his frightfully gloomy cry, in a loud to-hoo—to-hoo—to-hoot. Never before had I felt loneliness so sensibly. Replenishing the fire, I again sat down. Only a narrow belt of clear sky, far down along the eastern horizon, was visible. Soon the rain fell faster, while the wind could be heard moaning dismally through the tree-tops far above us. Still the heavy breathings of the Professor told that his slumbers were undisturbed. Shaking him lustily, and calling him by name, I tried to awake him. Turning partly over, he involuntarily rubbed his eyes with one hand, then mumbled a confused, unintelligible sentence. "Wake up! wake up!" I cried, earnestly. Rubbing his eyes again, he sat up and calmly surveyed the state of affairs, merely remarking, in his inimitable manner, "Well, this is very *romantic*, aint it?"

The howling of the wolves, increasing in numbers and apparently approaching nearer, warned us not to let our fire get down; so, getting up again, we raked up the coals, and piled the wood thereon, until it blazed out brightly, despite the rain.

(*To be continued.*)



For the New York Coach-maker's Magazine.

GEOMETRY OF CARRIAGE ARCHITECTURE.

BY A PRACTICAL COACH-MAKER.

PART FOURTEENTH.—BODY CONSTRUCTION.

THIS job is laid down completely after a square rule, and is very simple in construction, as far as workmanship is concerned, the ordinary swell of a compass-coach being all that is required. The side view of the frame shows for itself, with very little further information. The two bars, A A, of the hind boot, are spring bars, which should be well framed, and secured with wrought-iron corner plates. There is no necessity in extending the rocker-plates beyond the front of the body proper and the front

door-pillar back, as the rocker can be made sufficiently strong without. There is a door in the hind boot, which can be made either double or single. A door, also, can be formed in the front boot in the same manner as that in the back, or a hinged lid at the driver's heels will answer the same purpose. The drag, completed, will be found on Plate XXVI. of this volume.

ADVANTAGES IN USE OF CONICAL AS COMPARED WITH CYLINDRICAL WHEELS.

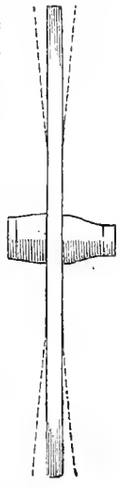
In commenting on the article in the last number of the Journal, on wheels, I will divide the reply under four heads; the advantages on the side of conical, beveled, or disched wheels are as follows:—

1. There is a tendency to keep the tire tight.
2. The bearing of the wheel and axle-box is against the collar of the axle instead of on the axle nuts.
3. Disched wheels allow the body of a carriage to be made wider without increasing the entire width of the carriage.
4. Disched wheels do not throw the mud so much into or on the panels of carriages.

(1.) Theory and inclination at once lead us to the conclusion that the proper form of a wheel is for it to be perfectly flat, and to move in an upright position; this, in fact, is so with all wheels under certain favorable conditions; the most common example is the wheel of a railway carriage; in this case, however, weight is of little or no consequence, and it has a smooth, regular iron pathway on which to run, and from which it cannot deviate.

Far different is the case of an ordinary carriage wheel; lightness here is of the utmost importance; and it must besides travel quietly; so wood has very properly been adhered to in their construction.

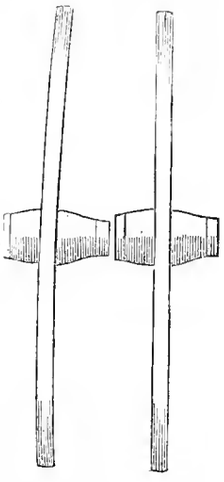
Let us suppose a carriage wheel of wood made perfectly upright, and running on an axle-tree, arm set parallel with the ground, under the most favorable conditions. There is always more or less vibration in a carriage wheel as it passes over the road; now, with an upright wheel the vibration would occur on both sides of the wheel; any practical mechanic is aware that if his tenons are continually moved backwards and forwards in their mortices, they must inevitably become loose; and this is what would happen to the spokes and stocks of an upright wheel. There is, however, a worse fate for the wheel; it may meet an obstruction in the road, and although not made to go over it, may be violently forced against it, as frequently happens when a carriage is turned sharply round a post at the corner of a street. In actual use, the constant friction and concussion of a wheel on the road has a tendency to squeeze and beat out the tire to a greater length, and, besides, to bruise the ends of the spokes into the stocks and felloes; these acting together cause the tire to become loose, and when once loose the vibration would cause all the framing to become loose and the wheel to become crushed and fall to pieces.



By slightly coneing the wheel it acquires many of the strong points of the arch; in the first place, the vibration is very much reduced, and in running as it were hard on the axle collar, the woodwork is pressed tightly into the tire, which will remain tight for a longer time.

(2.) By using an upright wheel on an horizontal axle arm there would, in use, be as much tendency for the axle box to bear against the nuts in front as against the collar behind. Now, it is of the greatest importance not to throw any unnecessary strain on the nuts, as the point is the weakest part of the axle, and the nuts would not for any lengthened period bear the strain, without stripping off the threads of the screws and dropping off. By using a coned wheel on an axle arm thrown down to match, the strain of the wheel is thrown on the strongest part of the axle arm at the collar. If by any accident the nuts were to come off, or the point of the axle to break, the wheel would retain its tendency to bear against the hind collar of the axle, and would probably run for some time, till it were discovered that something had gone wrong. If, on the other hand, the axle arm was set horizontal, and the nuts gave way, after proceeding but a very short distance the wheel would fall off, and a serious accident would occur.

(3.) In using coned wheels it will at once be seen that more comfort and accommodation can be given by making the body of a carriage wider than if the wheels were made upright; and this is of great importance, as it allows a carriage to be made more commodious without a proportionate increase of weight.



(4.) A very great advantage is gained by using coned wheels, especially to open carriages, as the mud collected and thrown up at every revolution of the wheel is thrown slightly away from the carriage instead of into it. This will become apparent by referring to the annexed figures, and when it is considered how much ladies' dresses become injured by a too rapid delivery of the quality usual in London, it may be guessed which kind of wheel would find most favor with the fairer forms of creation.—*Carriage-Builders' Art Journal.*

GEN'L WASHINGTON'S CARRIAGE HORSES.

Our "gossiping" cotemporaries having *used up* everything of interest concerning the Father of his country, have engaged in a petty quarrel about the color of his horses. Irving having asserted that the carriage horses of the modern Cincinnatus were *white*, Dr. Buchanan replies,—"Now I cannot deny that the General may have had white ones; but this I do say, that the carriage sent for me and my sister had *cream*-colored horses, with long white manes and tails, usually a pair, but one—I think two pair; and I recollect a pair of light bays—Virginia bloods." Now, since the settlement of this question may have an important bearing upon the permanency of this Union, we hope the matter will be decided very soon, *to the satisfaction of everybody!*

Scroll Designs.—One of our plates for February will contain several original designs for scrolls, contributed by several painter friends of this Magazine.

Home Circle.

For the New York Coach-maker's Magazine.

EVENING AT THE GATE.

BY MISS ABBY C. DEAN.

"Does this remind you of —— that evening at the gate?"—*Old Letter.*

With the token you sent
Are thoughts of a long, bright, beautiful day,
Whose air was so pure that we called it May,
And a quiet evening, blent.
I'm with you once again!
The toil-spent day is o'er, and at eve
We stand at the gate, for, we're both to leave.
And we're happy now as then.
Our faces are all aglow!
Perchance 'tis the light of the sunset skies,
That illumes the brow and makes bright the eyes;
'Tis that brightens mine, I know.
Over the gate we lean,
And we talk of days that we call long-past—
Of beautiful days too bright to last,
And dark hours falling between.
So earnest, we have not seen
That behind the hills the sun has sunk low,
While we, far away in the "Long Ago,"
Make pictures of what has been.
Of the present now we speak;
Ah! the glow was *not* caught from the evening skies,
That lights up so sudden the quiet eyes,
And flushes the pallid cheek.
The faltering voice proclaims,
As we call the names of the loved and good,
There are some not spoken, but *understood,*
And our *hearts* record those names,
Each one without a blot.
It is music to us, and all the time
Our hearts repeat it like some sweet chime,
But our lips, oh! they breathe it not.

Since then long years have flown,
And, alas! my heart now scarcely dares
To remember the name in its silent prayers
That once blent with my own,—
With spirit as free from care.
Ah! would that I stood at that gate again,
And with heart as happy as mine was then,
And the friend that met me there!

For the New York Coach-maker's Magazine.

DECEMBER MUSINGS.

BY MISS ANNIE M. BEACH.

Adieu, adieu, departing year!
Faint, and more faint, thy steps I hear;
Thou go'st to join the ages flown,
The dim, the distant, the unknown,
That were, and are no more.

Thou bearest from us sunny hours,
Glad song of birds, and bloom of flowers,—
And warm young hopes, and silent fears,
Go with thee to the grave of years,
Upon the past's still shore.

The young year cometh, glad and free,
Yet still our hearts go back to thee,
And fragrant flowers of memory twine
And lay sweet offerings on the shrine
Of what shall be no more.

Ah, me! how many hopes and fears
Lie buried with the buried years;
The past hath been, yet is not known;
Our joys and sorrows are our own—
By these we measure time.

Ere the new year is called the old
What story will our lives have told?—
What wealth of ours be borne away
With treasures of the past to lay
Down in the tomb of time?

Cambria, N. Y., December, 1860.

For the New York Coach-maker's Magazine.

QUENCH NOT THE SPIRIT.

BY LUA DELINN.

Beneath the dear old elm, which threw its grateful shadow over us in childhood—Carrie Alward and me,—I sit and recall her simple history. Let me write it down, and if my pen is not wholly worthless, the brief record will be a better exposition of the text I've quoted than any I have ever heard; it may be, not less orthodox.

"Died, on the morning of the 3d inst., Miss Caroline Alward"—that is what the paper says, and what the "bereaved friends" say; but, if dying is giving up the spirit, Caroline Alward's obituary might have been written years ago. It was then that the life of her young spirit was quenched; it was *then* she *died.* If I had known her only in her later years, I could never have learned to like or scarcely to tolerate her, she seemed *so wooden;* but, remembering her as she was when a child, I've never ceased to love her, not with the living, growing affection I give my other friends, but as we love the dead. It was a merry set, the one that Carrie and I gathered about us. None of us had ever been disciplined by the restraints of school; and though Carrie was not the acknowledged leader, there was no readier voice than hers to propose a game, and no lighter foot than hers to lead off in it. That was long ago, and the years as they passed have brought some changes to us all. Some have been overtaken by the sudden storm which well-nigh overwhelmed, but which they have had strength to buffet; to others, existence has been but a succession of rainy days. Very few have found life all bright, and even to those few it has lost its sparkle; but Carrie is the only one—*thank God! the only one*—who has been compelled to bear the burden of mortality no longer animated by the *living spirit.*

We, "all of us girls and boys," were wont to congregate at sunset under some buckeye trees, which grew down there on the river-bank, just opposite that point in the other shore; but it was up here on "the side hill," under this old elm, where Carrie and I fixed our private play-ground, and where, for several successive seasons, we wiled away the long hours of the Summer afternoons. It was Carrie's taste that taught the wild vines to hang their beautiful festoons about our play-house; 'twas Carrie who gathered the acorn-cups from beneath the oaks which grew so far above us on the summit of the hill; and Carrie who brought from the river the many-tinted shells, which pleased our childish fancies none the less because we called them *clams.* On this side the elm was our parlor; through its leafy screen we could look out on the river, and on the fields and hills beyond,—the river was broader, the hills were higher, and the fields far greener than now. On that side was our kitchen, separated from the parlor by two branches which the elm so thoughtfully drooped low,—one of them is dead, the other has been torn away. There, in that corner of the kitchen,

shaded by some low bushes, stood our cupboard, well filled with broken glass and china. Close beside it was our fire-place, and to the left of that our oven, where we baked wonderful batches of bread and cake, and pies of various names, but all compounded of the same material. I said "we," but it was Carrie who performed all the labor, while my part was to look on with approving smiles and exclamations of delight. "How I wish I could make *real* bread and cake, and such things!" she said one day, as she took her baking from the oven. I assured her that she would know how when she was old enough,—a period which seemed to me far off in the future. "But my mother says I ought to be doing it now, instead of wasting my time and soiling my clothes in this way." "Then why doesn't she teach you?" I asked. "She says it's more trouble to teach me than I'm worth. I can't learn anything, I'm so stupid. All our folks say so."

It was a new word to me, and I said, wonderingly, "What does that mean? what is it to be stupid?"

"Don't you know? Well, it's—it's—O, I can't tell you, only it's like *I* am. Why, you know Sam Stokes; it's pretty near like him; but he's a *real* fool, or idiot, I think they call him."

For a moment her eyes glistened as if looking through tears, then a dull, dreary look came over them, such as I had never seen them wear before, though for a long time they had seemed to be losing their natural brightness. Now Carrie was a great favorite with me. I looked up to her, partly because she was three years my senior, and partly that she seemed to me to possess natural abilities far superior to mine, or, as I would have expressed it then, she was so much smarter than I. I loved her because she was so gentle with me, and never teased me, as some of my playmates did. It grieved me at first that any one should say such cruel things of her, but the more I thought of it the more indignant I became, and I said, in energetic tones, "It's a story, Carrie. I don't care who said it." But she answered sadly, "No, Lua! my mother must know best." I had rather liked Mrs. Alward; she always treated me pleasantly when I went there to see Carrie; but now I recalled to mind numerous instances when she had praised me and blamed Carrie, without any reason that I could see in either case. One day there was a little party, to which we had both been invited; when I called for Carrie, "There's no use in her going," said her mother, "they only asked her because they thought they must, not because they wanted her to come; but I don't care, she may go—she's always in the way at home." Then, when Carrie was dressed, she continued, "I declare it makes no difference how much nicer Caroline's clothes are than yours, you always look the best. What *is* the reason?" I never thought of taking offense at the comparison between the quality of Carrie's clothes and mine, and didn't know there was anything wrong in my answer: "I guess it's 'cause my mother knows how to fix me," until my mother, when I told her about it, showed me it's impropriety. Another time I went over with a new book which had been given me. They asked me to read aloud one of the stories, and when that was finished we looked at the pictures. "Caroline," said her mother, "if *you* could learn like that, I'd send you to school." "My mother thinks I'll be a better reader if she teaches me herself," I ventured to say. "It's all well enough," she replied, for your mother to take pains with you; but what's the use in my trying to do anything with Caroline, *she'll* never be anybody." The recollection of these, and many similar instances, together with what Carrie had told me, made me dislike Mrs. Alward more than the few feeble words then at my command could tell; and now, though I am able to judge of her more correctly, I cannot overcome my old dislike. She was not, as I used to think, a wicked woman who hated her children, and Carrie in particular; but was merely fretful, coarse, and ill-natured,—incapable of a tender emotion. How could such a one understand the loving, trusting, yet shrinking, sensitive nature that so needed sympathy and encouragement? She thought herself a remarkably kind mother, because she never went to work deliberately to punish her children. She would, indeed, often slap to the right and left, feeling certain that on whomsoever the blows should fall they would not fall amiss; but "that didn't hurt them any." (What *good it did* I never heard her attempt to explain.) And it was *not* the blows that hurt, but the cruel taunt, the continual fault-finding and fretting, the utter want of sympathy with childish joys and sorrows, wants and weaknesses,—it is all this that checks the spirits of childhood in their joyous flow. If she had been a step-mother and had treated the children thus, they would have had many sympathizing friends. As it was, she was regarded by the acquaintances of the family as a too-fond mother, who made herself a perfect slave to her children.

For that day our play-house had lost its charm, and we went down hand in hand to play beside the river; but the thin, smooth stones we gathered, instead of skipping lightly over the water, as they always did when Carrie threw them, sunk sullenly, heavily down. At last, after much urging, I prevailed upon her to go home with me. She came the next day, and the next, and by that time we had agreed to "play school every day," and to "pretend that my mother was the teacher." Thenceforward it was in vain that our favorite tree daily waved its long arms toward us as if beckoning us back to its kind protection; we would not heed its call. What we had begun in play, Carrie took hold of in earnest. The Summer passed, the Fall and Winter came and went, and still she did not tire, but went on making rapid progress. Sometimes when she came her face would wear the dreary expression I had seen that last day that we played on the hill-side, but it would soon grow brighter. Once I came home from a neighbor's with my feelings dreadfully wounded. Some one there had called me "a homely little thing." "I'm ugly," said Carrie; "my mother says so; only to-day she said if I could know how ugly I am I'd never feel like laughing again as long as I live."

"Lua is not pretty," said my mother, "but *I* love to look at her, and it's no matter whether others do or not." For myself I was comforted at once, but was still troubled for my playmate, and I said, "And you love to look at Carrie, too, don't you, Ma?"

"Indeed I do! she always has a bright face for me, and the time is coming when I shall sadly miss it."

The little girl's face came out from the shadow that fell upon it when she spoke of her mother's taunting words; the eyes softened, and the lips looked as if they longed to utter words of endearment. For her the Winter sped all too soon. I think the Springs were earlier then than now. And the warm sunshine came gushing in at the lifted window and the open door, and streaming upon the grate, putting out the last spark which should

ever glow upon that hearthstone while we called it ours, —for the next fire we should kindle would blaze upon a Western hearth. All my playmates came to say "good-by," but it was Carrie who went with me on to the boat, and could not say good-by for crying. For the first time I could not sympathize with her, being, like all other children, pleased with change. My mother bent to kiss Carrie, and the little arms wound tight around her neck as if they would not be unclasped. Parting with all the long-tried friends who thronged about her seemed to move her not more deeply than did the parting with that child. She loved her, and, understanding her nature, dreaded to have her settle back into the life from which she had won her. "You will always be very kind to her, and gentle, will you not?" she asked of John Garrison, as, warned by the ringing of the last bell, he took Carrie's hand to lead her ashore. The request was unnecessary —she had always been the object of his especial care— except as it served to remind the weeping girl that she was not separated from all who understood and sympathized with her. I don't believe I gave one parting glance to the home where seven years of my life had passed so tranquilly. I could not know how closely around my heart its memories would cling in after years: but, as the boat moved slowly down the river—it had been moored there just above where the Buckeye trees stood.—I watched my playmates, who were gathered on the old play-ground, all waving last good-byes, or all but Carrie, and she, apart from the rest, with only John Garrison near, had dropped wearily upon the bank, and was weeping bitterly.

I would "very soon learn to write and would tell Carrie all about my new home and playmates" had been my promise; but the letter she received was penned by my mother's hand, while mine was idling among prairie blossoms or parting the vines which shaded woodland bowers. It told how I must miss my favorite companion, and regretted that I could not have her taste to assist me in adorning my play-house. But Nature's hand, more skillful than Carrie's, had been at work among the wild vines there; and I did not pine for her companionship, for our faithful Sancho, dog as he was, had, for the time being, taken her place in my affections. Was it very strange? You know I was only a child, and I've seen older persons transfer their affections from one object to another, and finally fix them upon some less worthy one than was our "old Sancho."

Six years passed. I had left prairie-land, and the city was again my home. Already I had learned to prize the associations which clustered here, and, still a child, to turn with yearning heart to the friends and scenes which my earliest childhood knew. But everything was changed. The vines no longer clasped their caressing tendrils around the elm-tree's trunk, or cheered its drooping boughs with their bright red trumpet blossoms. The city had lengthened its borders, the buckeye trees were gone, and the play-ground they had shaded was built over. Of those who had played there, some were dead, others were gone I knew not where. It was very sad, but "Carrie is left me still," I thought. She knew of my return, but did not call to welcome me. John Garrison persuaded me to visit her, so, waiving all ceremony, I went, with high hopes of the good time we should have. I would stay all day, and we would talk fast, and tell of all the changes that had befallen us since we parted. "Please tell Carrie that Lua waits to see her in the parlor," I said to the girl who answered the bell. They seemed hours, the ten minutes that I waited; then I heard a deliberate step along the hall, the door opened, and when I would have flung my arms about her neck, she quietly, coldly took my hand, *asked me if I was well, and if I would take off my bonnet.* She had chilled me to the heart. I thanked her in a tone colder, if possible, than her own, and, "as I could only make a short call, would sit with my bonnet on." My call *was* a short one. I went slowly and sadly to my home in a distant part of the city, wondering if that could be Carrie Alward, and why she had treated me so like a stranger, concluding that it was because she thought herself a young lady, while I was but a little girl. If I had known then all that I've since learned, she could not have repelled me so, and perhaps she might at that time have been won back to something like her former self; but I never again felt inclined to manifest the affection which, for the sake of old times, I still cherished for her in my heart. It was only lately that I learned, by comparing notes with John Garrison, to connect her earlier with her later history, and understand how the one explains the other, how the *living, loving* Carrie, the dear friend and playmate of my childhood, and the idol of John's boyish years, became, in her mother's hands, the wooden image upon whose shrine it were a mockery to lay an offering of love or friendship. "*So wooden!*" It was not my verdict only, but that of all who knew her.

It is midsummer now, but faded leaves fall upon my paper as I write,—fitting emblems, Carrie, of the love and faith and hope that fell away from thee so early!

Not yet have Autumn winds commenced their wailing,
For Summer now hath scarcely reached its prime;
But from the bough the withered leaves come sailing,
As if it were the dreary Autumn time.
Alas! what sadder sight could be than these
Dead leaves that are falling from Summer trees!

And oh! for the heart that while young hath been learning
To doubt where its love and its trust should be strong,
Its fountains of sweetness to bitterness turning,
And hushing the voice that should gush forth in song.
Its loves and its hopes early blighted—O! these
Are like *dead leaves falling from Summer trees!*

HOW TO STOP OMNIBUSES.—We take the following article from the *World* newspaper:—

"Some merciful correspondent suggests that the omnibus Jehus be furnished with brakes. This class of men do not own the horses, and therefore will not use brakes if they are put on the omnibuses for them. They have enough to do now in driving, taking fares, and looking out for passengers. But if the tongue of the omnibus be made with a *little play* where it is fastened to the front axle, and a brake be made by having a bar fastened to the tongue below the *evener*, and projecting in front of the fore wheels; then, every time Jehu pulls up, this bar will bear on the front wheels, and every time the horses start they will free the wheels, and in this way the poor beasts will have an easier time, and the driver have no more to attend to than at present."

We have observed a bad practice on the part of some drivers. Instead of speaking to, they whip the poor horses in starting, when they are sure to stumble.

Pen Illustrations of the Drafts.

FOUR-HORSE SPORTING DRAG.

Illustrated on Plate XXVI.

Sporting carriages, somewhat in the form of the one here presented, are very common among the successors of Nimrod, in England, and, indeed, a nobleman's establishment would not be considered complete without one. These are capable of carrying from fourteen to sixteen persons, besides presenting ample room for the necessary supply of provisions for the party. The roof is frequently so constructed that it answers all the purposes of a table, when boards, propped-up at each end, are laid across it, level with the roof. They are likewise a great "institution" for the race-course, among our trans-Atlantic cousins. The semicircular figures seen on the side of the boot, in our original design, represent steps with backs of patent leather to guard the panels from injury. The manner of constructing the body will be seen in the diagram on page 144 of this volume.

JAMAICA ROCKAWAY.

Illustrated on Plate XXVII.

At the late fair held at Jamaica, L. I., New York, S. B. Crossman, Esq., a carriage-maker of that village, exhibited the original from which our draft is taken. There are some original and suggestive features embraced in the design, which fully justifies us in presenting it to our readers, but which at the same time does not render it particularly necessary for us to follow them out in detail, since they will readily be seen in the drawing.

The front seat is hung on a pivot, so as to admit of being thrown forward, for the convenience of passengers when getting into the carriage, which arrangement is rendered the more necessary in consequence of the contracted space between the front and back seats. This, which in many carriages might be construed into a very serious defect, in this case is remedied by dropping the sunken bottom sufficient to give plenty of leg room to the passengers on the hind seat. The fashionable style of painting this description of carriage is lake, on which a broad red stripe is laid so thick as to give the vehicle a *fiery* appearance.

BRACKET-FRONT BUGGY.

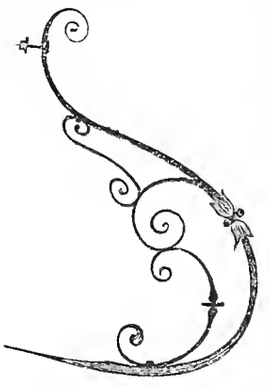
Illustrated on Plate XXVIII.

For no other reason than the simple one that this buggy is very crooked in the toe-board, we might call this the rail-fronted buggy. Whether this would be appropriate or otherwise, this form—rather a modified form of the Byron—is very fashionable in some sections of the country. The panels are wood, painted and ornamented with such figures as may be found on plates IV. and XXV. of this volume. The body, as a whole, is very much of the same type as that presented on plate XXIV.

Sparks from the Anvil.

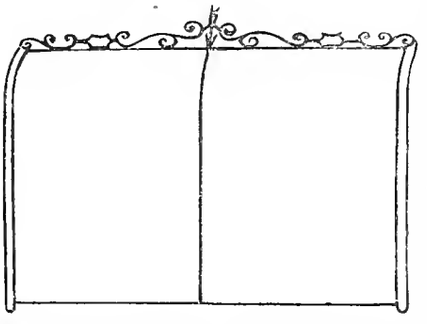
FANCY DESIGN FOR A PUMP-HANDLE BRACE.

Complying with the calls from numerous correspondents, we are induced to continue our series of designs for pump-handle braces. Like some others heretofore presented in this work, the brace under consideration is rather too complicated for the generality of tastes, but not too much so for some manufacturers who are obliged to cater for customers very whimsical in their notions. The two collars seen in the design, to look finished, will require to be plated, as well as the tip at the top, from the bolt upwards. Were the whole length of the main or outer portion of this brace, embracing the large collar, silver plated, it would not look bad in a carriage designed to be showy.



DASH WITH FANCY-RAIL.

This is another showy design, for which the Editor of this Magazine entertains no fancy, however much it may claim the partiality of some of his readers. As many are accustomed "to let themselves out," in *fancy touches*, when getting up something for exhibition at the different agricultural and other fairs, our *distorted* fancy-rail may save others the trouble of *distorting* their brains on a future occasion, should they be inclined that way. In conclusion, it is *our* opinion that it is much more easy to the artist to draw a rail such as we illustrate, than for the blacksmith to carry it out in execution, although the last is certainly practicable.



PRESERVING IRON FROM RUSTING, WITH ZINC.

A correspondent of the *Scientific American*, on Staten Island, N. Y., writes that the discovery of a Belgian, that zinc placed in contact with iron and steel would prevent them from rusting, is not new. He says: "This has been known to me for some time, and I have by this means kept from the effects of the damp sea-fogs which prevail here table cutlery, my gun, &c. I made use of zinc in this way in endeavoring to preserve from rust a valuable gun, which neither oils, cases, nor India-rubber coverings would protect from the effects of moisture. I did not sup-

pose that there was anything but what was well known to the scientific world in this property of zinc in preserving iron, which is, I presume, owing to electricity. My gun has also led me to prepare an oil which, as a lubricator and preservative from rust, excels anything I have ever used. I expose some of the best refined coal-oil to a considerable cold, and use the more liquid part which rises to the top, mixed with a very little refined castor-oil, then some unslacked lime, and, after being shaken well and submitted to a slight degree of heat, filter it."

NEW METHOD OF CONSTRUCTING SPRINGS.

WE learn that a firm in Philadelphia have adopted a novel mode of putting the leaves of the springs they manufacture together. No slit is cut in the leaves, nor is any bolt used. It is done in the following manner: Two notches are made in each edge of the two top and two bottom leaves, these notches being made where they will be covered by the band, which, when shrunk on, is indented, by means of a punch, into each notch. The band is thus indented at four points on each side, eight places in all, having a very firm hold upon the leaves. The intermediate leaves are secured by the nibs, made in the leaves near the ends in the usual manner. This method does away with the necessity of weakening the spring at the center for a bolt, and it is said that the band is very effectual in securing the leaves firmly.

IRON.—All descriptions of iron which have been examined have been found to contain sulphur; they also deposit silica and black matters when treated with diluted acids, and consequently are impure. Iron can only be reduced to a pure state by the pharmaceutist by careful preparation. Industry can only furnish iron of a relative, not absolute, purity. Iron in a perfectly pure state is not liable to rust, but retains all of its metallic luster.

Paint Room.

HOW TO USE ENGLISH VARNISH.

AMERICAN painters, on the score of economy, are accustomed to use English varnish for finishing-coats only, and it cannot be dispensed with for the finer classes of work under any circumstances. We hope the day is not far distant when we shall be able to produce a domestic article "equal to any imported." Indeed, our friends, the Messrs. Crockett & Co., Newark, N. J., already have such confidence in an article of varnish which they manufacture and advertise in our columns that they will "guarantee it to be equal to the best English." This is assuming much, and we would recommend that our readers put the question at rest by giving their varnish a fair trial.

With no intention of thus running off the track, we set out with the design of telling our friends "how to use English varnish," which, generally speaking, is a subject indifferently understood with many carriage painters in this country. Where large surfaces are to be varnished, and especially where the ground coats are American varnishes, the previous coat should be rubbed over night, so that the "sweating-out" process may be through with before the next coat is laid on. This sweating-out coat should be carefully rubbed down again before the next coat of varnish is applied, and allowed at least two hours for the dampness to dry out. We have good reasons for believing that more injury arises from want of care in this respect than from any other. If American painters would divest themselves of a little of their go-a-head-a-tiveness, in varnishing, they would soon become convinced, in this respect at least, that success in such a "race is not for the swift."

After the last coat of English varnish has been applied and allowed twenty-four hours "to set," a slight current of air may be allowed to circulate through the varnish-room to facilitate the drying process, provided the atmosphere is not surcharged with dampness, in which case it would prove more injurious than beneficial. On the third day the job may be washed off with clean cold water, care being used immediately afterward to dry the surface well with a damp chamois, for where dampness is allowed to remain the job will present a "streaky" appearance. This process should be repeated every day until well hardened, for the more it is washed the more brilliancy will the job possess. A carriage washed every day for a week will in most cases do in the second week if only washed as above on every other day. *No work on which English varnish is laid should ever be exposed to the sun while it is hardening.*

Another thing: varnish once taken from a can and used out of should never be returned again if you desire to have your stock in good order. Never leave a can uncorked; it injures the varnish in its flowing qualities to leave it exposed to the action of the atmosphere. Never adulterate your English varnish with turpentine or other material if you would have a good gloss or durable varnish.

Some painters will not use the proper care in regard to keeping their brushes in good order and clean. There is nothing more necessary than this, for with unsuitable brushes it were in vain to undertake a nice job. Brushes, when not in use, should be hung by a pin through the handle, immersed in varnish, in such a way as to avoid contact with the vessel containing it, either at the sides or bottom, in sufficient quantities to reach above the band. In removing brushes from the vessel where they are suspended, for use, some portion of the contents will unavoidably be taken out. This should be supplied, or else a crust will be formed under the binding, and which, if not attended to, will be a constant source of trouble to the workman.

For the New York Coach-maker's Magazine.

LESSONS IN PRACTICAL COACH-PAINTING.

BY F. W. BACON.

In presenting this series of practical lessons in coach-painting to the readers of THE NEW YORK COACH-MAKER'S MAGAZINE, it is our intention to commence at the priming and continue a regular course of instruction, so that all, even apprentice boys, may derive benefit from our experience—withholding neither "great secrets" nor "good things" from our fellow-craftsman. In giving our views, we shall do so without restraint, and base our theories upon actual experience and practice. In following out the subject, we shall endeavor to be brief, concise, and direct to the point, and at the same time sufficiently explicit to be clearly understood. As the first and most important step, then, we shall begin with

LESSON 1.—PRIMING THE CARRIAGE-PART.

As a solid and firm foundation is necessary in a building of any kind, so it is with *building* a good job of painting. By a "good job" we do not mean merely one that looks "elegant" when it leaves the paint-room but, one that will be durable, and stand the weather and changes of climate. As soon as the wood-work is made, it must be primed, or the grain will rise, and make extra work, that would otherwise be unnecessary. Dust the work well and lay on your color freely and evenly, taking care to fill all cracks, crevices, and nail-holes well; leaving no "tears" or fat edges. Finish by a quick light stroke, drawn lengthwise the grain.

Some painters pay no attention in regard to the priming color, but use any old dregs they get hold of, and slap it on in any way to cover the work. A greater error cannot be committed, for there is nothing more important than the priming. Here is a recipe for as good a priming as has ever been used:

Take good white lead, ground in oil; add lamp black, sufficient to make it a light grey, and as much dry red lead, in bulk, as black. Mix this quite thin with boiled oil and a little turpentine. If the weather is not favorable for drying, add a small portion of japan. This priming answers equally well for bodies and carriage-parts.

All painters do not use turpentine in priming, but it is better to use a very little, as it cuts the oil and facilitates its striking into the wood, especially if the oil is old.

In the next number, we shall give the second lesson explaining the manner of leading the carriage parts and getting them ready for coloring and striping, or fine-lining.

RECIPE FOR MAKING VARNISH

FOR LUMBER WAGONS AND ROUGH WORK.

Take raw linseed-oil by weight, .	60 parts.
Litharge, ...	2 "
White vitriol, ...	1 "

Boil the whole together until all the water is evaporated.

This is a very cheap and durable varnish, and very useful for all work that is much exposed to the weather. Try it.

We shall continue to give recipes pertaining to the painting department, so that all may find something of value. F. W. B.

ECONOMICAL PAINTING.

MR. FITZGIBBONS.—Look-a-here, painter, I'll tell you what color I want my wagon painted; I want it some sort of a color that wont show mud and dust, so as to save the trouble and expense of washing it—you know!

PAINTER.—Very well, Sir, I'm the boy to do it!

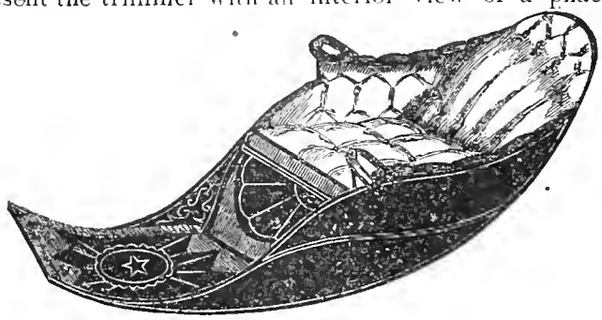
CHROME GREEN.

M. GUIGNET, of the French Polytechnic School, has devised the following method of producing chrome green:—Calcine a mixture of three parts of boracic acid and one part of bichromate of potassa at a temperature of about 932 degrees, and there will be a disengagement of water and oxygen, and a formation of a double borate of potassa, and sesqui-oxyd of chromium. This salt, which is fixed at ordinary temperatures, is decomposed by water into acid borate of potassa and sesqui-oxyd of chromium, which in its nascent state absorbs water, and forms a hydrate of a superb color. By washing and decantation the hydrated oxyd is separated from the acid salt. The resulting chrome green is used in commerce either as an oil paint or as a color for printing calicoes. To make the first, it is dried and powdered, and to produce the second, the paste is introduced directly into the grinding mill. This color is of great body and of a brilliant tone, which keeps in artificial light and form mixtures with the usual yellows whose primitive purity remains unalterable.

Trimming Room.

BODY-LININGS FOR A PHAETON.

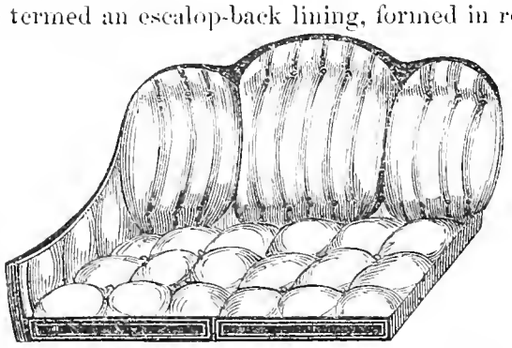
In the illustration which accompanies this article we present the trimmer with an interior view of a phaeton



complete in its parts, as far as the body-linings are concerned. The plaits in the back, sides, and cushions are so well drawn that they require no particular explanation. The fall is of a more difficult and novel formation, composed of leather and cloth in combination. The lower portion of the fall, which is supposed to be blue or drab cloth, may be laid either plaited or plain, as fancy dictates. Over this is secured by stitching the inverted arch of bow patent-leather, neatly stitched. A Tournay-carpet of a fancy pattern completes the job. In the hands of a skillful mechanic our design will, when fully carried out, make a very tasty and handsome finish to the inside of a phaeton.

PHAETON FANCY-BACK LINING.

FANCIFUL as this design appears at first sight, yet it is perfectly practicable, although decidedly original. It may be termed an escalop-back lining, formed in rolls, to



which should be given much swell in the center, in the usual manner, and be of cloth or leather material. Cloth, coteline, or other fine-woven fabrics, have the preference in all the finer kinds of carriages, the advantages of which over leather need not be enumerated here, since they are patent to all practical minds. We have shown but a portion of the lining in this instance, our chief object being merely to illustrate the back portion of the body-linings.

EXPLANATION OF STITCHING PLATE, K.

No. 1 is a design, in full figure, for the falls to seats.

No. 2 is a half-figure pattern for cushions.

No. 3 is a pattern for the corners of either a boot or dash.

No. 4 is a very pretty design in half-figure for a center-piece to a boot or dash-flap.

For these designs we are under obligations to Mr. O. C. Hutchinson, of Bellefontaine, Ohio.

The New York Coach-Maker's Magazine.

JANUARY 1, 1861.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

BOUND VOLUMES *of this work are sold, singly, for* $3.50 *per vol., or Vols. I. and II., when purchased together, for* $6.50. *The two volumes, bound (including the subscription for the third year), will be furnished for* $9.50. *The three volumes, in numbers, will be sent for* $8, *when ordered. Single volumes, in numbers, will be sold for* $3, *or any single number for* 25 *cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for* 25 *cts.), can be had at this office for* 44 *cents. When mailed (the postage on which we prepay),* 55 *cents. Any volumes left with us will be bound for* 75 *cents each in our uniform style.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

"S. D., of N. Y."—The cost of some of the staple articles for trimmings are: for enameled top leather, 18 cents; split dash, 13 cents; duck, (50 ins. wide), 55 cents; head linings, cloth, $1.75 and $2.00; body, do., $2.25 and $2.50; hair (picked), 30 cents; moss, 10 cents; whip-sockets, (India rubber), per doz., $4.50 and $6.00.

"R. A., of Pa."—We intend in our next issue to give the New York prices current (to be continued quarterly), of the principal articles required in manufacturing carriages.

"J. A. S., of Pa."—We have no knowledge of any work called the "Coach-painter's Stencil Book." Perhaps some of our correspondents can enlighten us on this subject.

MORE "MERCY" NEEDED.

SINCE the "Appeal for Mercy," recently squealed forth by our London cotemporary, we find that he is not sufficiently sincere to wait for our charitable concessions and merciful castigations to arrive, but is at his old tricks again of propelling his willful perversions on the wrong side of the usual road for editorial courtesy.

As previously stated by us, we are not quite sure that our would-be opponent (under the garb of an implied fraternity in business) is not trying to create an advertising influence, from our large circulation, for his own especial benefit, thus giving him an importance in the public mind that his own unaided writings are never likely to attain on either side of the Atlantic. This consideration seems sustained by our opponent's remarkably reckless course; and we really feel conscious of needing pardon from our readers whenever we condescend to notice the London concern at all in our life-like pages of

improvement and progress. Our cotemporary evidently "hangs on behind" our fast vehicle in hopes of "getting a lift;" but even the Cockney boys must feel tempted to cry out, "Cut, cut be'yind!"

The October number of our London cotemporary exhibits a queer sample of his ideas of fraternity. His notions of propriety and property certainly might lead him to become a prominent member of some socialistic society wherein all things that men usually and naturally prize are held in common. Our editorial brother has one peculiarity, however, "hanging on behind," which we believe the socialistic brethren are not guilty of—the black sin of ingratitude. His October issue contains the usual amount of his freebooter style in making selections from our American "ideas" and articles; then, on arriving at his last page but one, instead of giving us any credit for the only signs of vitality the pages contain, he fills out the remaining editorial space with a direct attack upon this Magazine and American artists, in a would-be-witty article, headed "American Ornamental Designs." This peculiar fashion of looking a gift horse in the mouth leaves our learned (with scissors) friend somewhat in the predicament of a monkey who is said to have been very well pleased with a looking-glass so long as its ornamental and shining surface brightened up his brainless features; but, on finding that its equally useful and solid back had no properties that would flatter him, he began to make wry faces; he wanted to smash up the entire institution, and what small amount of imitative brain he had became excruciatingly dull, while his pilfering propensities acquired a renewed activity for mischief and ingratitude.

The article, "American Ornamental Designs," makes slashing fun of those pictorial embellishments which are sometimes used (merely *as* ornaments) on our various carriage panels. The attempt to be witty, A. D. 1860, by making ridicule of armorial bearings or heraldic devices, fully emblazons the escutcheon of stupidity fairly earned by our opponent. A mind so married with "the heiress of blunders" should entitle our fortune-hunting friend to all the honors of what the Herald's College would call an "escutcheon of pretense." There is scarcely a joke that can be cracked on the subject with which American students for the past century are not quite familiar. If we suppose our would-be opponent as aware of this fact, then certainly his attempt to shine at wit in that department of fun must be considered as arriving rather too late for seasonable appreciation. If we suppose him as not being aware, then such gross ignorance of our literature and politics, our manners and customs, must convict him of being entirely unqualified to write about any American affairs whatever.

We have heretofore usually given our cotemporary credit for understanding English affairs, but, really, we now begin to suspect that he mistakes his own peculiar loyalty to stupidity for a healthy and legitimate loyalty properly due from him to the British crown. This mistaken kind of allegiance may be observed in nearly all the articles, paragraphs, or sentences that our astutely and obtusely dignified brother puts forth, and he now "goes in for" more stupidity than ever in the pages of his second volume.

Without "going into the depths of the science" of heraldry, we might suggest the marshaling of sundry appropriate items for emblazoning a suitably heraldic shield in honor of our London cotemporary, who lives where such matters not only have a legal authority, but a very potent signification. We might suggest sundry pairs of scissors, some rampant and some couchant, with capacious paste-pots in salient quarterings; the entire grouping to derive its heraldic vitality from a monkey standing at the honor point. But, as already observed, this kind of wit has been left to our school-boys long, long ago; and we therefore leave our London friend to enjoy his Rip-Van-Winkle ambulance in quiet, complacently satisfied as he seems that 1860 must be *annus mirabilis*. Really, we must grant that it is, in some points of view, especially when we find this London man's "original" criticisms upon our "Original Ornamental Designs."

Our use of this very title, "Original Ornamental Designs," is a proof that we offered them to our readers as merely suggestive of those ornaments a good coach-painter might think proper to embellish the panels of a carriage with, according to style and size, as he and his customer might agree in considering suitable. We never entertained, for a single moment, the idea of any heraldic signification. In this country, *nous avons changé tout cela*, long ago. All the world knows this fact; but yet, our ignorant Cockney opponent tries to scribble himself into notice by a convenient supposition that we are as ignorant as himself. This convenient (for himself) supposition is the only foundation for the stupendous superstructure of supposititious wit he "fraternally" sends to Americans in his October issue.

With the exception of corporation seals, State documents, or Federal warrants, and in coinage, or in the diplomas of certain institutions, we make no use of heraldic insignia in this country. No American citizen, as an individual, pretends to make any use of them. This simple fact repels all our opponent's jokes, leaving them as incoherent and dead as the outside chips first taken off by some rusty old spoke-shave. Our American readers can hardly expect us to answer such wanton perversions seriously and *seriatim*, coming, as they do, from a writer whom we have already proved to be (as the French say) *au bout de son Latin*, or (as our English friends sometimes say) "run out the end of his wits." Suppose we vote the aforesaid writer—in the spontaneous spread of

American benevolence—a handsome wheelbarrow, built in the most classical style for the purposes of propulsion, and present him with the freedom of the city of New York in the bargain. He can here have his own choice among any amount of armorial bearings, surmounted with all sorts of crests, and yet be quite free from all governmental duties on such devices. He may have all the sides—outside or inside—covered with transfers from Debrett or Barney Burke, including the exploits of Whittington and his cat, and yet not care for any Herald's College or flunkey critic. This style of "entertaining parody" would be quite safe for our cotemporary, unless he should happen to meet some other party as full of obstinate conceit as himself—but that is scarcely probable out of London. All the orthodox griffins and lions he might get painted would not "propel" his vehicle, any more than those which (as with us) are simply "ornamental."

Apart from these considerations, our learned brother appears to forget that he has already given the world the benefit of his logically stated maxim, that a carriage without some such ornaments would be "altogether incomplete." Gentlemen who may have lost a carriage by some mysterious agency might do well to ponder this fly-away maxim, and good coach-painters may wish to learn this decisive style of obliteration.

The looseness of style in expression seems to be a happy concomitant with such minds as that of our London critic on "American Ornamental Designs." Their self-complacency in ignorance, and their boastful, greasy, vulgar loyalty—or what some suppose to be loyalty—is so emphatically a senseless clamor as to ignore the rules of grammar in its manifestation. Hence, the London man commences his attack upon "American Ornamental Designs" with an absurd explosion of British loyalty—or what he supposes to be loyalty, although some poople might be tempted to call it stupidity—which, we feel assured, all well-bred or hard-working English readers must consider very disgusting.

In the same issue, under another subject, we are complacently told that the London publication is anxious "to place the best construction possible upon the efforts of our transatlantic fellow-tradesmen." This *is* kind. We are then reminded of "the sensitiveness of the American character." This is really cheering, because we may thus fairly infer that the writer has some "idea" of sensitiveness, even if "borrowed" from us.

We are next told that Americans do not like European-built carriages, because "the American horse—generally speaking—does not attain that strength and muscular power commonly found in the English breed." The fact is—generally speaking—the other way. If the writer had said that "the American horse—generally speaking—has more strength and muscular power, in proportion to his size and weight, than any horse of similar breed in England," he would have told the truth. However, we shall not argue with such outrageous ignorance, but refer the London writer (or writers) to those of our numerous sporting journals which ably "talk horse." Really, our London friends must learn to enlarge their course of reading, or they may soon be left "altogether incomplete" in the fogs of forgetfulness, and the sensible portions of the British public will have to get its periodical literature from America.

We are next treated to a review of some examples of American vehicles, given on an engraved plate. Whether by accident or design we cannot say, but we can say that the drawings are shamefully distorted from our originals. "The one" given as *Fig.* 1 is an American buggy, and the remarks are as intolerant as ignorance can make them.

Fig. 2 is intended to show an American "light rockaway," or carry-all. The remarks say that it shows a sort of "barrenness" or "want,"—two things which an American mind does not usually associate with a carry-all. Those London chaps certainly do invent some "ideas" for us. Some of our country farmers will have to consult "the dictionary" to find out something about "barrenness" or "want."

Fig. 3 shows a Portland sleigh, and the remarks are rather complimentary. We may, therefore, infer that our London friends are willing to give up making what they usually call "sledges."

"*Fig.* 4 is the design for a coach, *and one* which is very commonly used." According to this language, we expected to find two examples, but found "the one" only. The remarks show that our previous simile of "some animated four-post bedstead," in relation to English carriages, has not been forgotten, and the London men try to pay us off for our temerity. We are next told that "the weight of American coaches vary." What that sentence may mean is beyond any Yankee guess; for, as George Francis Train recently said in his famous speech at Liverpool, "We write English, but we speak American." This joke is a "very light *one*."

Fig. 5 is intended to show what is called "a Piccolomini caleche." By some process peculiar to our London friends, the "variations" of the English drawings are invariably to the disadvantage of the American examples. Perhaps this is a sample of "British fair play." The London publication calls this caleche "an Americanized English barouche," and then coolly proceeds to say that "the alterations made *have* evidently taken away whatever beauty it may *have* possessed."

In this happy and self-complacent "style," our London cotemporary proceeds to put on the black cap Old Bailey fashion, and to pass sentence upon us American rebels, as follows:—

"Having made these few remarks upon the illustrations given, we leave them in the hands [O, don't!] of the reader, feeling assured [of course!] that whatever merit [praise?] the designs deserve will be [will]ingly accorded by the [what or which] English tradesmen. If they [who or what] are not equal to the expectations raised [queer crop!] by the eulogical [not your kind of logical] effusions of our American cotemporary, it [what is that?] is no fault of the [which] writer. The selections made are all [?] favorite patterns with [?] the American public, and therefore may be received as faithful [bungling?] represensions [what can *they* be?] of the American style [what is that?] of carriages."

No doubt our readers may consider this tiresome matter, but the above paragraph might serve as a specimen of the ignorance and flippancy we have to contend with while undertaking to "reason" against our London cotemporary's sage reasons.

INGENUITY UNRIVALED.

Wonderful and diversified as have proved to be the inventions of the present day, yet all these have been eclipsed by the wonderful steam-plow, produced by our "old friend," *the great* Colonel Shall-I-Sneeze, successor of "the notorious Yocum," in the ownership of the Pine Island farm, in Texas, whose interesting history and wonderful exploits were described up to one year ago this time, on page 175 of our second volume. The invention and peddling of top-lifters, three-wheeled equizotals (*the front a small wheel*), plug-bitts, cross-perches, side-spring buggies, etc., were all *too small game* for such ambitious minds as that with which "our old friend" is blessed, consequently "the Pioneer" sought for *an enlarged field* for his inventive genius to exercise itself in. But, as Burns tells us,

> "The best laid schemes o' *mice* an' men,
> Gang aft a-gley."

So in the Colonel's case. While traveling in the South "with *our* own buggy," it seems the Colonel, who pretends to meet everybody "on the square," came across another adventurer as "open for a bargain" as he himself was. For the better understanding of our subject, we will call this new acquaintance Mr. Cute.

Mr. Cute, as the sequel shows, was laying around for something to turn up; so was Shall-I-Sneeze; and something *did* turn up,—a bargain between them, in which Shall-I-Sneeze disposed of all *his* "right and title" to the astonishing inventions concocted in his prolific brain during several years, for *that* celebrated Pine Island farm before alluded to. In this transaction each was satisfied with his exchange, feeling that he had "sold" his man. But here the usual smartness of "our old friend," Shall-I-Sneeze, seems to have been outdone by *his* friend Cute. After Shall-I-Sneeze had settled himself down on his new farm and made extensive improvements thereon, and collected together *that* family library which the "City Fact" man told us was the envy of every one who saw it, and made considerable progress with the steam-plow hereafter described, he became "one day" very much surprised on the discovery that some other man's farm covered the one Cute had deeded to him. Under such circumstances there was but one alternative left,—that was for Shall-I-Sneeze to evacuate the Island, and that, too, in a hurry.

But great minds are not to be discouraged at trifles. The Colonel, as some of his confiding friends have found, has an enterprising as well as an inventive genius (!), and so he next turns up in the thriving city of Philadelphia, where, according to a cotemporary, *the* wonderfully "fast" steam-plow is so much improved that it is no longer simply a steam-plow, but combines in itself the plow, the seed planter, the roller, and the harrow, performing all the operations, at once "and in their regular order, which are necessary to put in a crop of any of the small grains. It is also, by ungearing the gang of plows, an engine, capable of sawing wood, drawing water, hauling the crops to market, or performing any other operation requiring power in the whole range of husbandry. In this consists the great merit of the invention. It seems to answer all the conditions necessary for successfully applying steam to the common labors of the plantation.

"It is designed, we have said, to plow the land, sow the seed, roll and harrow at one operation. When operated in this way, the machine travels on the ploughed ground; but when breaking prairie for the first time, the plows are readily arranged so as to permit the machine to travel upon the sod."

When we last heard of this wonderful machine it had *only* twelve, now "it has eighteen, moldboard (?) plows attached to the ends of a corresponding number of radius bars, which are securely fastened to a revolving shaft, upon which the engine is made to operate through the medium of cranks and connecting rods. These plows are placed upon this revolving shaft in a spiral form, so that in rotating through the ground one plow is always in advance of the other. This peculiar action of the plows gives to the machine the advantage of cutting the soil at a greater depth than it can be done with the common plows. Also, the rotary action of these plows upon the ground propels the machine, as positively as the action of the wheel upon the water propels the boat.

"Immediately back of the plows is the seeding arrangements, back of which are two revolving drums of six feet diameter, and which support the main weight of the engine. These drums are so acted upon by the revolving of the plows that they regulate the cut of the latter upon the ground. For instance, it is intended the

plows shall cut at one revolution eighteen inches of the ground; in that case these drums advance upon the land the same distance. So also, if it is desired to cut three feet at one revolution of the plows, the gearing connected to these drums can be so regulated as to carry the machine forward three feet to each revolution of the plows.

"By throwing out the connections to those arms, you have a stationary engine to do any kind of farm or plantation work.

"The harrowing is also done by a rotary action, the same as the plowing.

"The machine is designed to cut a land seven feet wide. From experiments already made by the inventor, he is confident that he can work successfully from 10 to 32 acres per day," which is a feat unrivaled since the day when the inventor of that "three-wheeled *equirotal*" astonished the Buckeyes with its uncommon performances.

There is also connected with this plow a mowing machine, which will cut a swath equaled only by the ingenious inventor himself when out on an expedition "Eastward." In view of these combined improvements, it must strike every intelligent mind that the inventions of such "small fry" as Fawkes, Walters, Hussey and Drew, "are nowhere," when compared with the greater and most astonishing inventions of the *tall* Colonel Shall-I-Sneeze. It is astonishing what a great smoke will arise about some machines *when the steam is put on*, and this plow has already "kicked up such a dust" that *justice* to the great inventor leads us to note the circumstance in our pages, for the information of "old friends." Those whose ambition to see the Colonel "on important business" may lead them to visit Philadelphia will find him there, if they are quick about it, which we urge them to do before one of the most remarkable inventions of the most remarkable geniuses of the age "runs into the ground."

THE MECHANIC AS AN INTELLECTUAL BEING.

FOR ages there has existed a certain class of persons who have looked down with contempt upon another class of their fellows. These have claimed for themselves—perhaps more so formerly than at present—the right and title of being the intellectual classes, as compared with that class who honestly earn their bread by the sweat of the brow. These have so long arrogated to themselves refinement, &c., that the three terms, refinement, aristocracy, and drone, have come to be synonymous in the world's dictionary.

Mankind, taken abstractly, may be denominated intelligent beings; but if narrowed down to the individual, may be often found very ignorant. Of this latter class, generally, are those who look with scorn and contempt upon industrious and honest mechanics. This we have had an opportunity to discover many instances of in our business transactions with them. We have come in contact with men of acknowledged literary attainments, who yet were as ignorant of the laws of mechanical and practical science as we can possibly imagine. This class of persons would scorn the idea of associating with a mechanic, however irreproachable his character might be. These *exclusives* would not be seen in his company under any circumstances. O, no! theirs is a position above the common herd, among whom they include the mechanic and all who are necessitated to earn an existence from the labor of their hands.

We make no distinction between the *soi disant elitè* of America and the proud aristocracy of monarchical Europe. They are but the counterpart of each other, both alike censurable for having traduced the fair character of that class of men who by their industry produce the most necessitous and ingenious articles which distinguish civilized from barbarous nations. For much of this hostility we are indebted to that loyal old bigot, Dr. Samuel Johnson, whose chief ingenuity merely consisted in respecting the ideas of great men and giving their most charitable thoughts a bad interpretation. He tells us that the term "mechanic" means a low workman, and the *overgrown* exotic has been *forced* in the hot-bed of nearly a century, until it has become "the *greasy* mechanic." It is not our design, however, to examine this subject in the glimmering light of other days, but in the brighter prospect of the present age.

With a warm interest in the welfare of our fellow-mechanics, we hail with delight the organization of Institutes, Lyceums and Libraries, having for their object the improvement of mechanical minds. With the same end in view, we are glad to see so many well-supported special serial publications spring up around us, all tending to make the mechanic respected in the eyes of the community, and, if studied, will surely elevate his character. An interchange of ideas through these mediums has a direct tendency to make the mechanic respected in the minds of the *pseudo* intellectual.

Let the mechanic remember that Franklin and Fulton, and Whitney and Morse, with many others we might mention, were all mechanics, who have not only been generally respected, but whose names are inscribed on the pillars of immortality for future generations to admire. These were but men, yet they were men of study, and this fact constitutes the chief difference. It is not so much in the size of brain that is needed, but a little more exercise of that already in possession—a little *freer ventilation* of ideas—in order to attain to a higher standard of respect among the "educated classes." Imagine yourself, then, fellow-mechanic, as standing beneath the lofty dome of an intellectual Walhalla, where a niche is still vacant and may be filled by you. Take a retrospect of matters along the

shores of time. How few of the millions of books which once were popular now survive the wreck of age, yet the pyramids, obelisks, and other productions of mechanical minds still remain. Diveing into the depths of knowledge let the soul drink in inspiration, until you realize the *dignity* of your calling. What others have accomplished you may do, not by purchase with gold, nor the power of political or other friends, but by unceasing study and indomitable energy. Let the standard of your ambition have inscribed upon it the word—Excelsior! and then contend manfully in the struggle for its attainment, for in so doing you will obtain a decisive victory,—a far more honorable one than the Cæsars, Alexanders, and Napoleons, who have waded through streams of blood, have obtained.

PATENT CHAMPION-BANDS FOR ALL AXLES.

Much attention has lately been given to the improvement of carriage-bands. The loud call for bands which would present a handsome appearance and at the same time prove effectual in excluding all dust from the outer ends of nut axles, since these have come into general use, has produced the one it is our pleasure to illustrate. These, as will be learned from an advertisement in another department of this Magazine, are manufactured solely by the Messrs. Hannah & Storm, of Poughkeepsie, N. Y. These gentlemen take great pains in having every band extra silvered, and much care is exercised in fitting the caps and otherwise finishing them, so that they may *prove* first quality in all respects. The cap to this band is more readily adjusted and not as liable to get out of order as in the screw-band, while the costs are but a trifle more. Having been extensively introduced throughout the country, we learn that it has already—and deservedly so—become a decided favorite with carriage-makers. An article in relation to this band will be found on page 17. In figure 2, *a* is the lip of the cap at one side, *b* the screw, which by a simple contrivance on the opposite side of the cap, *c*, secures it firmly in place. An agency for the sale of these bands has been established at 104 and 106 John Street, N. Y. City.

Fig. 1

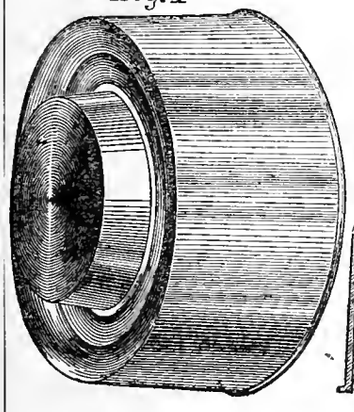
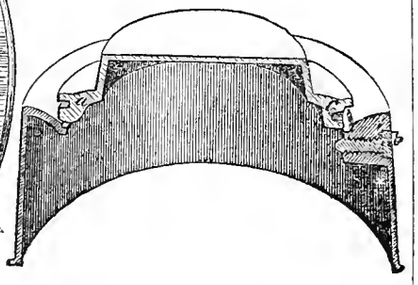


Fig. 2



YEARLY SUBSCRIBERS.

There are a great many friends to this Magazine who prefer commencing their subscriptions with the January (this) number. As we did last year so we propose—as offering to do in our December number—to take all such for the calendar year as are not particular in having the work for binding. Those whose subscriptions closed with the issue of the last month are earnestly requested to renew their patronage by enclosing the amount of three dollars, carefully directed to this office. If any are disposed to complete their *broken* volumes, any numbers can be had, at the rate of twenty-five cents each, for that purpose. All Registered Letters containing money are at our risk; mark this and insure their safe carriage by paying 5 cents. Some friends have gone to their P. O. to register and been told by the Postmaster—"don't register; it only tells people you have money in that letter, and it *may* be stolen," and so they go away without registering, and perhaps it is stolen, probably by *that* Postmaster himself, because you have neglected to get the sure evidence that you entrusted a letter to him, which had you done, could have been easily traced. With three years' experience in large receipt of letters the loss of the first registered letter is yet to be heard of.

EDITORIAL CHIPS AND SHAVINGS.

The Blacksmith's Daughter and the "Mitten."—The following story is told of two lovers in Alleghany County, Pa.:—

"In the neighborhood of an oil creek lived and labored a son of Vulcan, who, with his limited means, had barely enough to secure a small piece of land and to obtain scanty living for his rising family. The ideas of his children had been taught to shoot but little in any direction towards knowledge or refinement, and he little expected to be anything more than the village blacksmith. But when the oil fever broke out, learning of the success of his neighbors in finding oil, he thought that he might while away his spare hours in drilling a hole upon his own homestead lot; and, having tools convenient, he went to work, and after a few weeks of patient industry, was successful in obtaining a good show of oil. It was soon noised about the village, and the blacksmith was *somebody* at once. He had a daughter, also, who had blossomed into maidenhood almost unnoticed and unknown, but now became more an object of interest to the few young men in that small community. It became a question how to break the ice of former indifference, and to secure a favorable acquaintance with the heiress of the oil well. For a while the natural timidity of the boys kept them aloof; but at last one of the boldest and best favored among them determined to try his luck, and on a Sunday evening, attired in his best, absolutely marched forward and offered to escort the damsel home. Imagine his chagrin when she, turning upon him a look of lofty independence that would have done honor to a Broadway belle, replied in language more severe than chaste, 'Nonsense! you can't come that! *Dad has struck ile!*'"

VENTILATION OF LONDON OMNIBUSES.—A correspondent of the London *Builder* says, there are some 7,000 omnibuses plying daily in London, carrying on an average 100 persons each. The comfortless state of the great majority of these 'busses renders it a matter of moment to those who are forced to avail themselves of threepenny or fourpenny fares to the city to appeal to the proprietors of these vehicles for some little attention to one or two points. Three out of four of the omnibuses are too small for twelve insiders, more particularly if a fat gentleman or lady get wedged in on the same side, when there is but one vacant place, and that is at the far end from the door. Well, you have to spread your arms to catch the roof ridge, for there is no guide-strap to hold by. At length you are seated, in a space 9 feet by 4 feet 6 inches, and 5 feet high; the air is suffocating; an endeavor is made to open the ventilator, or what is so called, but it won't move. "Conductor," cries some one, "open a window." Well, it won't open; or the party sitting next to it very properly refuses to incur the hazard of a crick in the neck. Ventilators! did I say? Why, sir, they are certainly made of wire gauze, but so fine that they absolutely exclude air, and might serve as protectors to a miner's Davy lamp. I want to teach omnibus-owners that a ventilator, to serve the purpose, ought to have perforations large enough to pass a small pea; and that even these, but particularly that at the driver's end of the 'bus, should be made *to open* in hot weather.

CARRIAGE-MAKING IN NEW HAVEN.—The New Haven *Journal and Courier* says that, in the first six Wards, including the city proper, the carriage-making business alone employs a capital of $862,000, or more than one fifth of all the capital employed in manufacturing. It gives labor to 1,596 persons, who are paid $707,930 in wages, and manufactures 13,726 vehicles a year, valued at $2,228,460. This is not so great a proportion of the trade of the city as it was supposed belonged to the carriage interest, but it does not include the forty or fifty factories connected with, and dependent, to a great extent, on carriage-building. In the above statistics, only those factories are included which produce over $500 worth of goods in a year.

The Coach-Maker's Letter-Box.

LETTER FROM MISSOURI.

ST. LOUIS, MO., NOV. 12th, 1860.

FRIEND STRATTON:—From the metropolis of the great Mississippi Valley I will endeavor to write a brief letter for "our box," but not without many misgivings as to its acceptance. In truth I feel too dull to write a letter to an intimate friend, much less for the perusal of the "craft;" yet a promise made long ago impels me to attempt a duty already neglected too long.

"*Frustra laborat, qui omnibus placere studet*," says the old proverb, and it says truly, as one may see every day if he will but look about him; therefore, if I please no one, "deal not angrily with me." I have always thought the weather had a great influence over the minds of some persons,—I know it has over mine, for it is a dull day, with clouds,—not "rare and roseate shadows," but thick masses of sable curtains, through which the sunbeams strive in vain to struggle. I will not philosophize on this subject, fearing the letter-box, in its plain simplicity, would resent such treatment; therefore let me proceed, in a civilized way, to write a very ordinary—and, methinks I hear you add, a very dull—letter.

Were you ever in St. Louis? Did you ever mingle with her 150,000 inhabitants that crowd her narrow alleys —misnamed streets—lined with dingy-looking buildings towering up so high that his effulgent highness, King Sol, has to wait until mid-day ere he can peep down on the crowded sidewalks? Perhaps not; at least I'll suppose so. Why is it that all the cities in the West, where land is plenty, are so cramped? From the river up to Fourth Street all the streets are so narrow that drays can but pass, while the sidewalks are filled if even a solitary "skeleton" passes along. Many a time have I spoiled the transparency of "Frank Miller's" best by stepping off in the muddy street, in order to pass one of those *belle*-shaped "institutions." Above Fourth Street there is a little improvement; but it is not until you get out two or three miles that one feels comfortable. Here the streets are wide, the sidewalks broad, while palace-like residences and large yards give us some idea of what Daniel Boone called elbow-room.

St. Louis, in my humble opinion, is destined to be *the* city of the West. Her situation is unsurpassed, for she sits, like an acknowledged queen, high on a glorious throne, overlooking the "Father of Rivers." The wealth of a scope of country, rivaling the Roman Empire in her palmiest days, is laid at her feet—not only the products of the field, but exhaustless beds of minerals, outweighing California's golden stores. A thousand chimnies roll up huge columns of smoke, and it settles over the city like a portentous cloud, while, down by the glowing fires, the brawny arms of the begrimed sons of Vulcan send forth an anvil chorus that testifies to a solid basis for future greatness. The men of wealth are just opening their eyes to the importance of manufactures, and ere long vast rolling-mills will be established for the manufacture of our iron, than which there is none richer in the world, nor more easy of access.

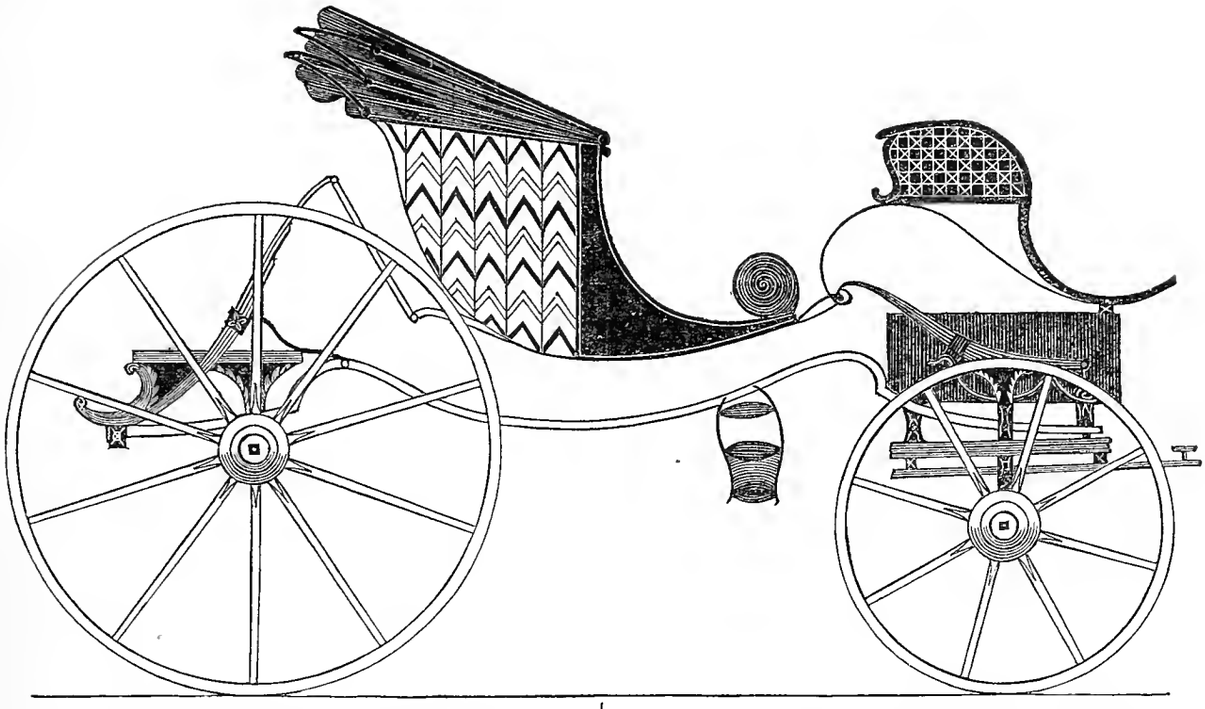
Our business is dull—so bosses tell me; but when one contrasts the present with the state of affairs three years ago, he concludes it is improving. The shops are about all full as far as I have seen, which augurs well. If the money market were only a little easier, all would be well. As it is, however, all the manufacturers with whom I have talked fear to risk any more than is absolutely necessary,—which is, perhaps, the best policy under present circumstances. *Au revoir.* W. S. H.

LETTERS FROM OHIO.

CINCINNATI, O., NOV. 16, 1860.

MR. STRATTON:—I perceive a growing evil in your journal, and I do not know as you will be able to entirely cure it. One instance will illustrate the case. You say the "Skiddy Rockaway," given on Plate XIX., was

THE CURIOSITIES OF COACH-MAKING.—NUMBER THREE.



originally designed for a broker in New York. Let me state what I know about this style of Rockaway. Three years ago, *or longer*, the Tomlinson Carriage Company, of Bridgeport, Ct., received an order for a Rockaway through the Messrs. Wood Brothers, of New York, for a Dr. White, of New Orleans. The design, I always supposed, and believe so now, was original with Mr. Charles Wood. It was then called the New Orleans Rockaway.

In Messrs. Geo. & David Cook's advertising book we find this same kind of Rockaway, called the "Louisiana Rockaway," and you call it the "Skiddy Rockaway." Now, why all these changes in name for this style of vehicle,—for this carriage has undergone no change in form since the original one was made for Dr. White? The question very naturally arises: Is it right or proper for every shop to adopt a new name for a new style which is not original with them? The Magazine, at least, should be very careful how it acts in this respect, so that it may do justice to the original designer, and give the credit to whom it is due. G. R. G.

CINCINNATI, O., Nov. 19th, 1860.

MR. EDITOR.—*Dear Sir:* I have not had an opportunity of seeing the June number of your Magazine till the present month; this will account for my not responding to the query concerning the "Budgaroo" at an earlier date.

The "Budgaroo," on page 19 of the present volume, is a fair specimen of an English crane-neck phaeton of the last century. Inclosed I send you a copy of a similar carriage from Felton's work on carriages, published at the commencement of the present century. The side-panel is striped "zig-zag." The *budget* and driver's seat are arranged so as to be removed at pleasure. The crane-necks are two iron perches, one on each side. A representation of a perch-phaeton of similar construction may be seen on page 1086 of Derby & Jackson's edition of Webster's Family Encyclopædia—Article, Carriages—which I should like to see published in the Magazine. The carriage last alluded to is severely criticised by Mr. Adams, who calls it a mechanical illustration of "much ado about nothing." Notwithstanding this criticism, these carriages, although by no means economical in their construction, nor adapted to the tastes of the present age, are not altogether devoid of beauty.

A word now in regard to what a phaeton is. Until lately no carriage-body having doors was ever called a phaeton. I intend, at some future time, to give a systematic and definite classification and nomenclature of carriages, and hope thereby to elicit discussion on this subject. In this there is much confusion at the present time,—different classes of carriages entirely overlapping each other.

CANT-BOARD.—It is correct to spell cant with a C instead of K. The use of the Cant-board is to exhibit the horizontal projection of one side of the frame of a body. Formerly bodies, instead of being constructed with a curved side-surface, had their sides to consist of three perpenplanes, making angles, or "cants," at the standing pillars. From this board containing these angles it received its name, and has now become a technicality. If we should change its name according to the change in carriage-construction, we should call it the Curvature-board. Yours, respectfully, ROBERT LURKINS.

LETTER FROM WASHINGTON.

POST-OFFICE DEPARTMENT, Appointment Office,
Nov. 16th, 1860.

MR. E. M. STRATTON.—*Sir:* In reply to your several communications relative to the postage on your periodical, THE COACH-MAKER'S MONTHLY MAGAZINE, within your State or the United States, or to the Canadas, or France,

I inform you that the work in question is found to weigh over three but not over four ounces. Consequently the postage on it *to any part of the United States*, when sent regularly to subscribers, is *two cents;* or, if *pre-paid, three cents per quarter.*

If sent to the British North American Provinces, it is subject to a pre-paid postage of three cents per quarter, which must be paid at the mailing office.

To France the postage on it is one cent an ounce, or fraction of an ounce, or, in other words, four cents per copy, to be paid at the mailing office.

ST. JOHN B. L. SKINNER,
Acting First Assistant P. M. Gen'l.

[Considerable dispute having taken place in some P. O.'s in regard to the legal postage on this Magazine, we have been induced to write to headquarters for such information as would settle the question. Above is the answer, published for our subscribers' benefit.—ED.]

LETTER FROM GEORGIA.

DALTON, GA., Nov. 30th, 1860.

FRIEND STRATTON :—By this note you will learn that I have changed my residence from Potsdam, N. Y., to this place, for the present. I have now been in the South ten or twelve days, and have been greatly disappointed in my expectations about finding a job. My advice to those in the North who think that if they were only in the Southern States they could find employment and good wages, is to remain at home, as such is not the case at present, in this State, as I have had an opportunity to find out in person. I have found that the employers have discharged what help they could dispense with, and are doing a smaller business. Such, friend Stratton, is the state of affairs in Georgia at the present moment. I hope that it will not long continue so. This is a small place which boasts of one carriage-shop, suspended at present. I intend to tramp into Tennessee in a few weeks, and see if the prospects are any better for carriage-painters.

I remain, yours, &c., JEREMIAH LYON.

[We give the above letter for the consideration of such of our readers as, on account of dull times at the North, think of visiting the Southern States in search of employment this season.—ED.]

INVENTIONS APPERTAINING TO COACH-MAKING AT HOME.

[Reported expressly for the New York Coach-maker's Magazine.]

AMERICAN PATENTED INVENTIONS.

*** TO INVENTORS.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

Oct. 16. IMPROVEMENT IN WOOD-BENDING MACHINES.—D. B. Hedden, of Newark, N. J.: I claim my mode of applying the end pressure, by means of an adjustable weight, as superior to all other modes, being a self-acting, perfectly graduating, and equalized pressure.

IMPROVED CARRIAGE-SPRING.—S. R. Pressy and Daniel Sheets, of Suisun City, Cal.: We claim a compound spring, composed of two elliptical portions, A A, two scroll portions, B and *a* C, shaped portion, *c;* the whole arranged in the manner and for the purposes set forth.

IMPROVED SCREW-WRENCH.—G. C. Taft, of Worcester, Mass.: I claim the combination of the nut, I, with its reverse screws, *c* and *d*, with screw, *a*, on the shank part, C, and screw, *b*, on the rear part of the sliding jaw, H, substantially as and for the purposes set forth.

October 23. IMPROVEMENT IN ATTACHING HORSES TO TWO-WHEELED VEHICLES.—J. W. Barnes of Murfreesboro', N. C.: I claim the combination of the fore-bar or breast-tree, *f*, the side-bars or shafts, *e e*, and swingle-tree, *b*, with the pole or tongue of a two-wheel cart or carriage, in the manner and for the purposes set forth.

IMPROVEMENT IN HARNESS.—S. L. Bond, of Greenwood, S. C.: I claim the combination of the collar, B or G, with the back-strap, I, when both are attached to the thills, A A, as and for the purpose specified.

IMPROVED SHAFT-TUG.—D. R. Brown and A. C. Babcock, of New Haven, Conn.: I claim a hinged shaft-tug, constructed and operating substantially in the manner described.

IMPROVEMENT IN SPOKE MACHINES.—John Gilchrist, of Berlin City, Wis: I claim the combination and arrangement of the revolving cutter, B, spoke-carriage, I, lever, H, spring, G, slot, S, pivot, W, pattern, C, guard, E, screw-wheel, O, and screw, D, substantially in the manner and for the purposes described.

IMPROVEMENT IN CARRIAGE-WHEELS.—D. A. Johnson & F. M. Gibson, of Boston, Mass.: We claim making the felloe-joints in wooden wheels by halving the ends of the felloes together, surrounding the joint by a metallic band provided with an inner projecting socket-piece or thimble, and inserting the outer end of the spoke through the thimble and band into the inner half, *n*, of the felloe, substantially as shown and described.

November 6. IMPROVED APPARATUS FOR DETACHING HORSES FROM CARRIAGES.—John Davis, of Elmira, N. Y.: I claim the arrangement of the whiffletree as constructed with the thills provided with the hooks, H H, and springs, I I, substantially as and for the purpose specified.

November 13. IMPROVED BOAT CONVERTIBLE INTO A LAND CARRIAGE.—Perry Davis, of Providence, R. I.: I claim the combination of the clamps, C D, and rubber-springs, *a*, formed as shown, with the axle, B, and boat, A, in the manner and for the purposes set forth and described.

I also claim the combination of the peculiarly formed rubber-spring clip, G, and plates, *g g*, with the axle, H, hook, F, and bow of the boat, in the manner and for the purposes shown and described.

I also claim the arrangement of the wheels, E, with the clamps, C, as and for the purposes shown and described.

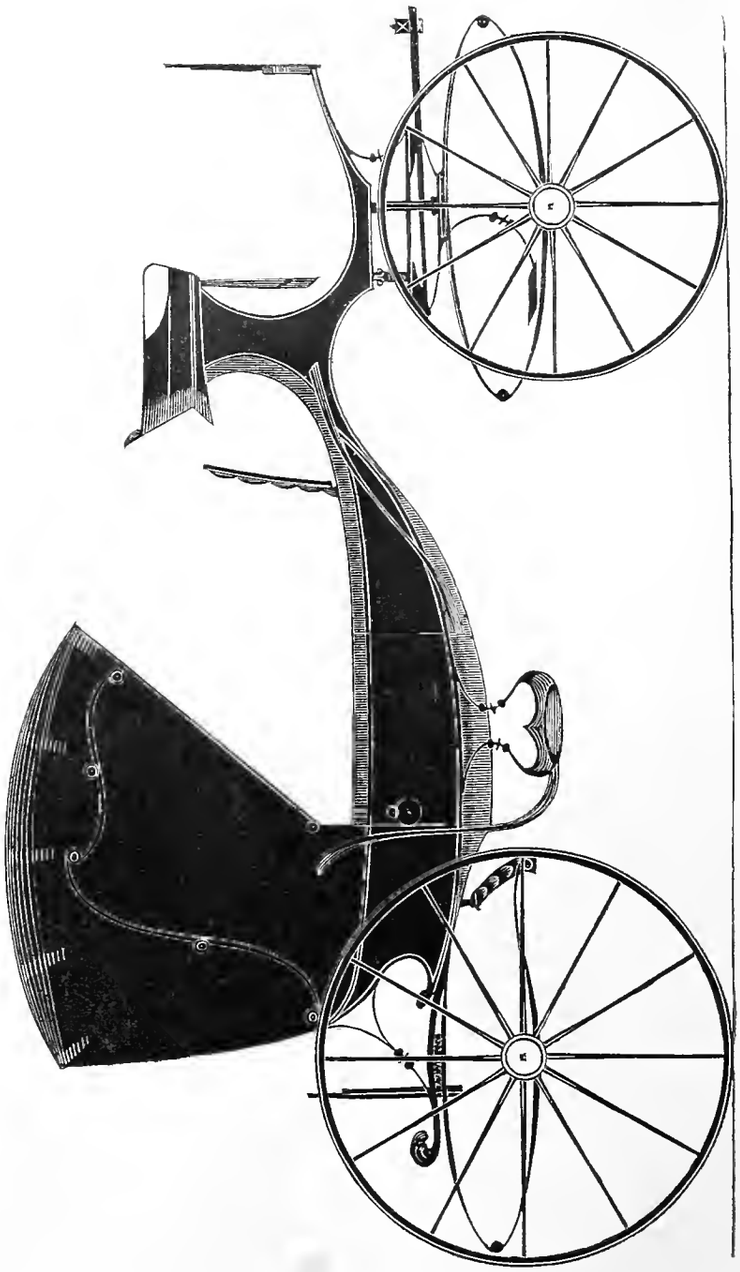
IMPROVEMENT IN ODOMETERS.—L. W. Nichols, of North Brookfield, N. Y.: I claim the arrangement of the tubular sleeve, J, in combination with the shaft, I, carrying the ratchet-wheel, H, and with the shaft, K, giving motion to the registering wheels, substantially as and for the purpose specified.

November 20. IMPROVEMENT IN METALLIC HUBS OF CARRIAGE-WHEELS.—James Johnson, of Garysburg, N. C.: I claim the combination and arrangement of the hub, A, cap, D, and the screw-shaft on the shoulder of the spoke, whereby the spoke is securely held in its position.

I also claim the combination and arrangement of the screw-nut, *k*, on the arm of the axle, with the pivot, N, in the cap, D, as described, for the purpose of preventing the oscillation of the hub on the arm of the axle.

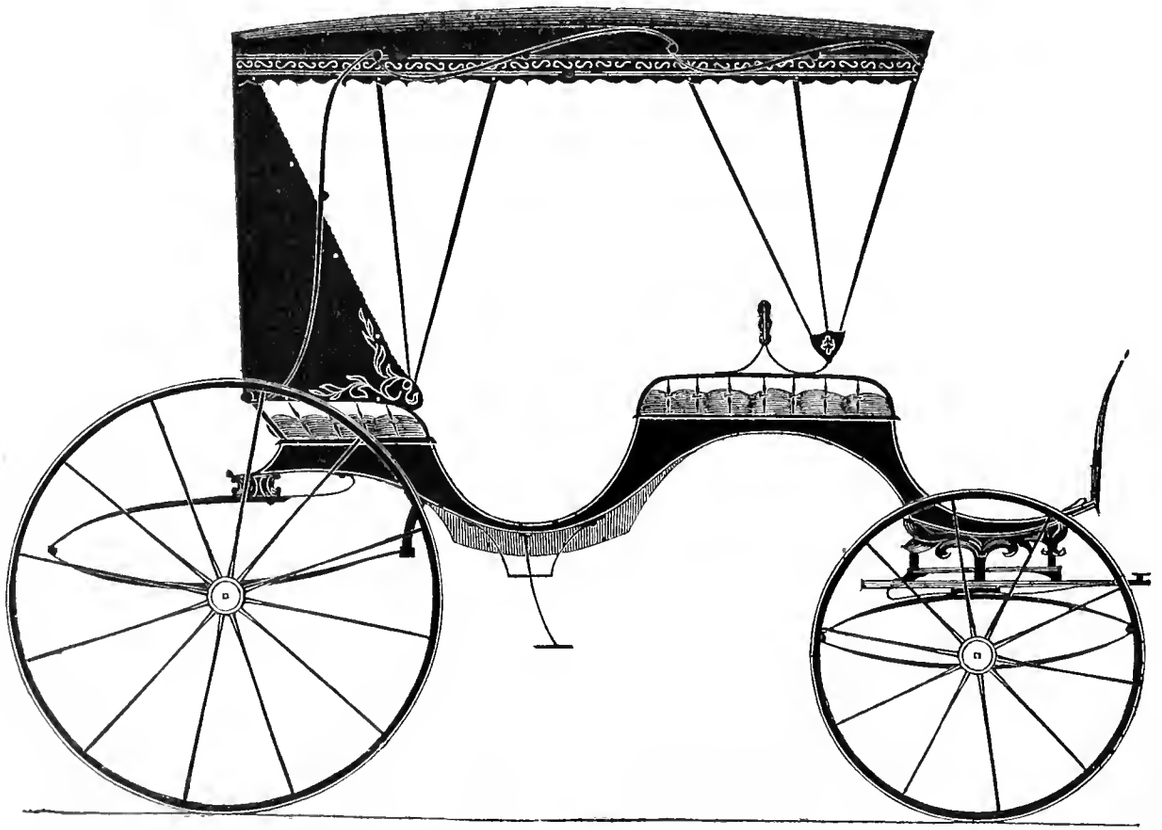
November 27. IMPROVED MACHINE FOR CREASING LEATHER.—W. S. Bullen (assignor to himself and S. A. Clark), of Indianapolis, Ind.: I claim the combination and arrangement of a series of creasing-disks, E, upon and with spool or thimble, I, when these are made to revolve upon the axle, J, substantially as and for the purposes designated.

IMPROVED THILL [SHAFT] COUPLING. — R. C. Millings, of Charleston, S. C.: I claim having the goose-neck, E, bent or curved so as to extend around the axle, A, at its back, and form a hook to catch against the axle in case of the breaking of the coupling or clip, substantially as set forth.



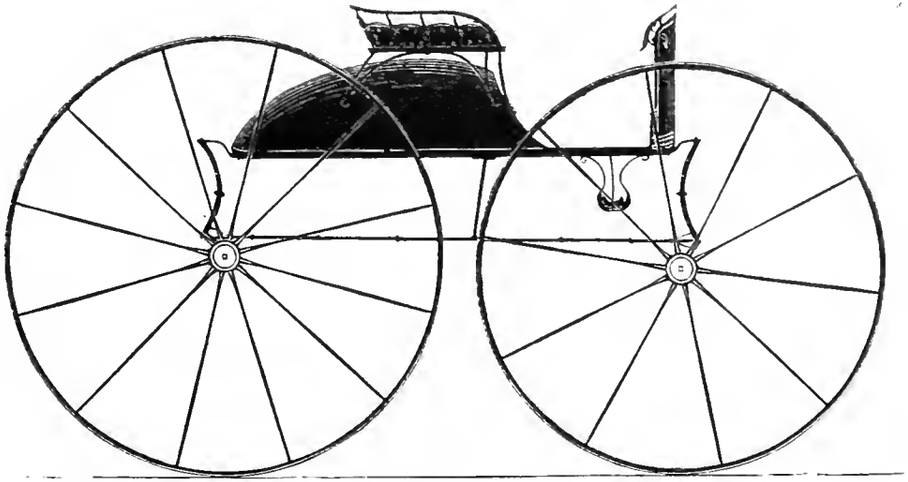
UNION BRETT.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 171.



SIX-PASSENGER CALECHE TOP-ROCKAWAY.—½ IN. SCALE.

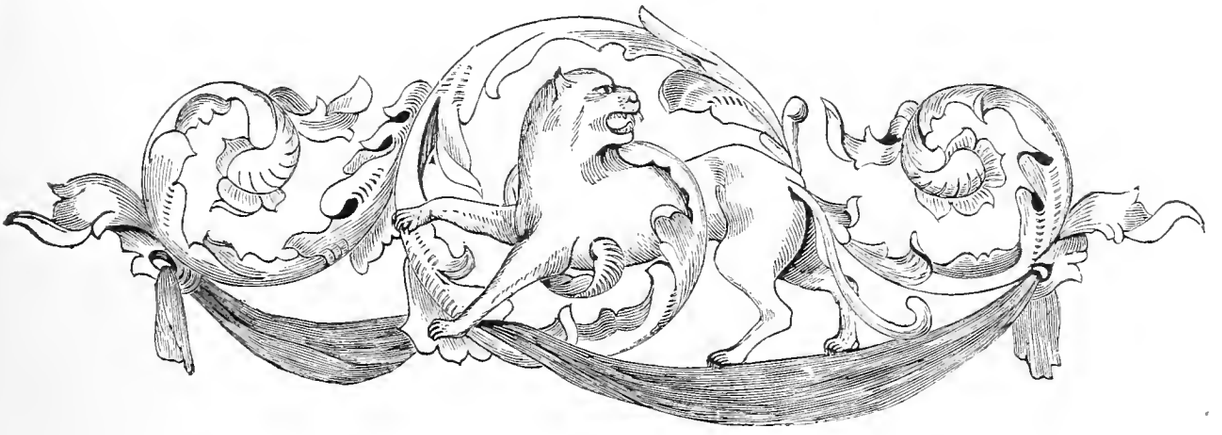
Designed expressly for the New York Coach-maker's Magazine.—Explained on page 171.



DAYTON PREMIUM BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—*Explained on page* 171.

No. 1.



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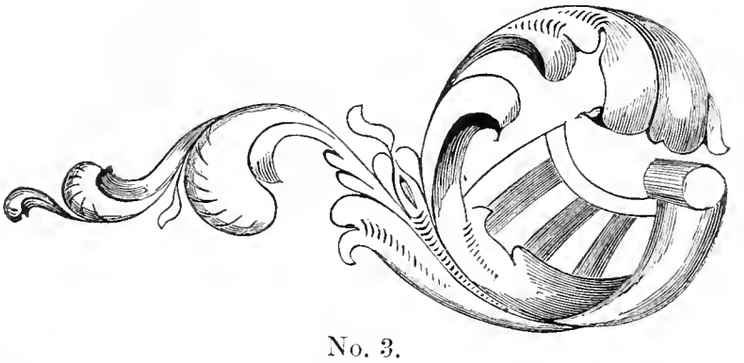


No. 3.

ORIGINAL ORNAMENTAL SCROLLS.

Engraved expressly for the New York Coach-maker's Magazine.

Explained on page 173.

THE NEW YORK COACH-MAKER'S MAGAZINE

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT

Vol. III. NEW YORK, FEBRUARY, 1861. No. 9.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

PRINCIPLES OF DRAUGHT.—No. I.

BY S. EDWARDS TODD, ESQ.

"Now, from fun and folly turning,
And the cup by tipplers quaffed,
And some useful lesson learning
In the Principles of Draught."—DRYDEN.

THERE is as much science in the correct understanding of the principles of draught, when applied to the construction and use of wheel vehicles, and some implements and machines, as there is in the science of navigation. It not only makes a vast difference how we hitch a horse to a vehicle, in the simple drawing of it, *i. e.*, in the amount of power required to draw it; but it makes, many times, almost an incalculable difference in the durability, or wear and tear of whatever is to be drawn. There are thousands of very good mechanics in the world who do not appear to know, nor even *to think*, whether it makes any real difference or not *how* we hitch a team to a draught of any kind, or how a different adjustment of the tongue or perch of a carriage affects the draught, or whether the draught will be at all affected by one adjustment of the different parts more than another. When the motive power is limited, it is very desirable to have that power applied in the most effective and economical manner; and if there is an abundance of power, it is best, usually, to apply the necessary power in such a manner that the *least fatigue* will be produced to the team.

How does an animal use his strength in drawing? By simply throwing his center of gravity *beyond*, or forward of his feet—precisely as in walking—and then, by exercising his muscles sufficiently, to keep his center of gravity just far enough *forward* of his feet to keep the draught moving towards him. When the load is much heavier than the weight of the animals, they must, necessarily throw their center of gravity farther forward of their feet than they do when their load is less than their own weight. Now, in proportion as the center of gravity is thrown forward of the feet, just in the same proportion must there be a lively exercise of the muscles; and, consequently, the fatigue will be in proportion to the amount and severity of muscular action. When an animal is obliged to throw its center of gravity to an angle of thirty or forty degrees forward of its feet—which is no uncommon thing—the muscular action is so severe that it cannot endure the fatigue but a short period of time.

We see, from these facts, the necessity and importance of learning young animals to draw by degrees. Virgil, in his Georgics, says, when learning young animals to draw,

"Early begin the stubborn colt to break;
For his soft neck a supple collar make.
Persuade him first to draw an empty wheel,
That scarce the dust can raise, or he can feel;
In length of time produce the lab'ring yoke,
And shining shares, that make the furrow smoke."*

Why will not a large and strong horse, that has never been harnessed, haul a heavy load the first time he may be hitched to it? Because he does not understand the principles of draught. He knows nothing about adjusting his center of gravity so as to move a load towards him,

* This verse appears to be altered from Dryden's translation of Virgil, omitting four lines which should follow the second in the text. Instead of "colt," in the first line, Dryden reads "child," which is given as the meaning of *vitulos* (pl. acc.), from *vitulus*, which may mean a child, a colt, a calf, or the young of any animal. The context of this verse warrants us in translating *vitulos* "steers," which is evidently required to make sense with what follows. We subjoin the original, and give a literal translation thereof, from which the reader will see that the verse, as given by our correspondent, has more of Dryden's poetry about it than the sense of Virgil:

Jam vitulos [*pl. acc.*] hortare viamque insiste domandi,
Dum faciles animi juvenum, dum mobilis ætas.
Ac primum laxos tenui de vimine circlos
Cervici subnecte, dehinc, ubi libera colla
Servitio assuerint, Ipsis e torquibus aptos
Junge pares, et coge gradum conferre juvencos;
Atque illis jam sæpe rotæ ducantur inanes
Per terram, et summo vestigia pulvere signent:
Post valido nitens sub pondere faginus axis
Instrepat, et junctos temo trahat ærens orbes.—GEOR., 4, 164–173.

The following is a literal prose translation of the above passage:

Now instruct the steers (calves) which you would rear for labor and rustic use, and commence the task (course) of breaking (taming) while the instincts of the young are susceptible, while their age is plastic. And begin by binding on their neck[s] loose collars of the tender vine; afterwards when their necks—*previously* free—shall become used to servitude, unite in pairs your steers fitted from the chains themselves, and forced to step off together; and afterwards frequently let them draw empty wheels [wagons] along the ground, and let them imprint their footsteps on the surface of the earth.—ED.

and to keep that center so nicely balanced that he can move forward and keep the load moving after him.

Some men have esteemed this subject so very important, that, in learning their young animals to draw, they have harnessed or yoked them, and placing them in a stall, would pass a rope from the whiffle-trees over a pulley behind them, and attach it to a weight resting on the floor. The rope is so short that the weight will hold the animal about two feet from his food; and when he walks up to his manger to eat, he will soon learn to adjust his center of gravity, so that after a few days, he can raise a heavy weight, and hold it. By this simple means, refractory and balky horses may be so corrected in their bad habits as to be rendered true and valuable animals, which, otherwise, would always be untrue when drawing a heavy load.

Another thing of very great importance in the principles of draught is, *the manufacture of harnesses according to correct, philosophical principles.*

Probably not one man in one hundred, who is accustomed to harnesses, ever for a moment thought whether they were made correct in every particular or not. But, without further comment, *there is* a very great defect in many harnesses, which is often the *chief* cause of galling the necks of animals towards the top; and it is allowed by many good judges on this point, to be the sure cause of sweney, more than anything else. I refer to attaching the traces to the hames *too far up* from the lower end. The traces are usually connected to the hames at about one third the distance from the top to the bottom. In harnessing one horse, this rule might be just right for hames of a given length, while for another horse it would be wrong, *i. e.*, the draught would come too high up on the animal's neck. Horses are not calculated to draw from the top of the neck, like oxen, but from the *bottom* of the neck. Therefore, hames of draught harnesses should be made so that the traces can be adjusted, readily, to bring the draught three or four inches only above the point of the most prominent point of the animal's shoulder. This adjustment can be effected, sometimes, when the hames are not too long, by letting them out at the top, and taking them up at the bottom. There is little danger of getting the point of draught too low on the neck. The point of draught, usually, comes about right when a horse is harnessed with a "breast-collar," or what some call a "Dutch harness."

I once owned a horse that would gall near the top of the neck, in spite of everything that we could do, until I took out the staples in the hames, and attached the traces about two inches lower, in the hames, which brought the point of draught about four inches above the most prominent part of her shoulder. The result was, that her collar galled her neck no more near the top; and, for a number of years, she improved in her lameness, which was thought to be sweney. This fact induced me to investigate the principles of draught more thoroughly, as they should be understood, in order to be master of the art of

HARNESSING HORSES CORRECTLY.

How many men, may we suppose, can take all the pieces of a harness and put them together, and harness a horse *correctly*, or according to the most approved philosophical principles of draught? Not one in fifty; and when we come among common laborers, it is very doubtful whether one man in one hundred could be found who would be able to do it just right. They might, it is true, get a harness on the horse, but "it would fit" with no more propriety and neatness than the armor of king Saul would fit the young stripling who slew Goliath of Gath.

Now, we propose to tell *how* a horse should be harnessed, and to point out some errors in harnessing them.

In the first place, the collar should not be too large, nor too small, nor too long, nor so short as to choke a horse when he draws. A collar should set close to the neck, and not be so large that a man can thrust his arm between the collar and the neck; and, above all, it should sit closely to the top of the neck. Every horse should have his own appropriate collar, just as much as one man should have his own boots; and it is far more important that a collar should be exactly of the right size for a horse, than it is that boots fit one's feet in every respect just right. A very small collar is very liable to gall a horse, while one that is too large, if it does not gall, will produce a sore neck, full of lumps and wrinkles. It is taken for granted that a collar will be soft and in proper order, and not as hard as a wooden collar.

The next step will be to adjust the hames as nearly right as possible. When the hames are much longer than the collar, they should be let out at the top, so that the lower ends may be brought close together, if necessary. If the traces appear to be attached to them too far from the lower ends, have them taken out and inserted in the proper place. The draught should be, for the most part, near the lower part of the neck. If the point of draught is high upon the neck, a horse is very liable "to choke down" when drawing, especially if his collar is rather too large and long for his neck. And more than this, if the collar is large, and does not fit closely to the top of the neck, on each side, and the point of draught be high up on the hames, the draught comes too much on the shoulder-blades of the animal.

Now, any one who has examined the anatomy of a horse, knows that the upper ends of the shoulder-blades are not attached very firmly; and a little jerk or thrust will move them, or break them loose; and this is what produces *sweney* and *shoulder-lameness* in multitudes of instances. The truth is, there is not elasticity and strength enough at the tops of the shoulder-blades to endure the draught of a powerful horse, especially when he is not harnessed properly. At the lower ends of the shoulder-blades there are *joints;* and every part is made very strong and elastic, and capable of withstanding a thrust equal to the strength of the animal. Experience, philosophy, and common sense teach us that the draught should be at the lower portion of the neck, because of its greater efficiency and safety to the animal.

A year or two ago I called on a neighbor, and found him in his field hauling stone on a stone-boat, with an old horse, and a very large colt. As I approached them, his colt, while drawing powerfully, fell to the ground, as if a bullet had pierced him. After rising and staggering, and moving with his load a few rods farther, he fell again, and so continued to fall and rise until they feared he might not rise again. *They* could assign no cause for all this, "unless he had a fit of the blind staggers," until it was suggested to put a different collar on him, and adjust the hames so as to bring the point of draught downwards,

almost to the lower side of his neck. This being done, the animal was "choked down" no more.

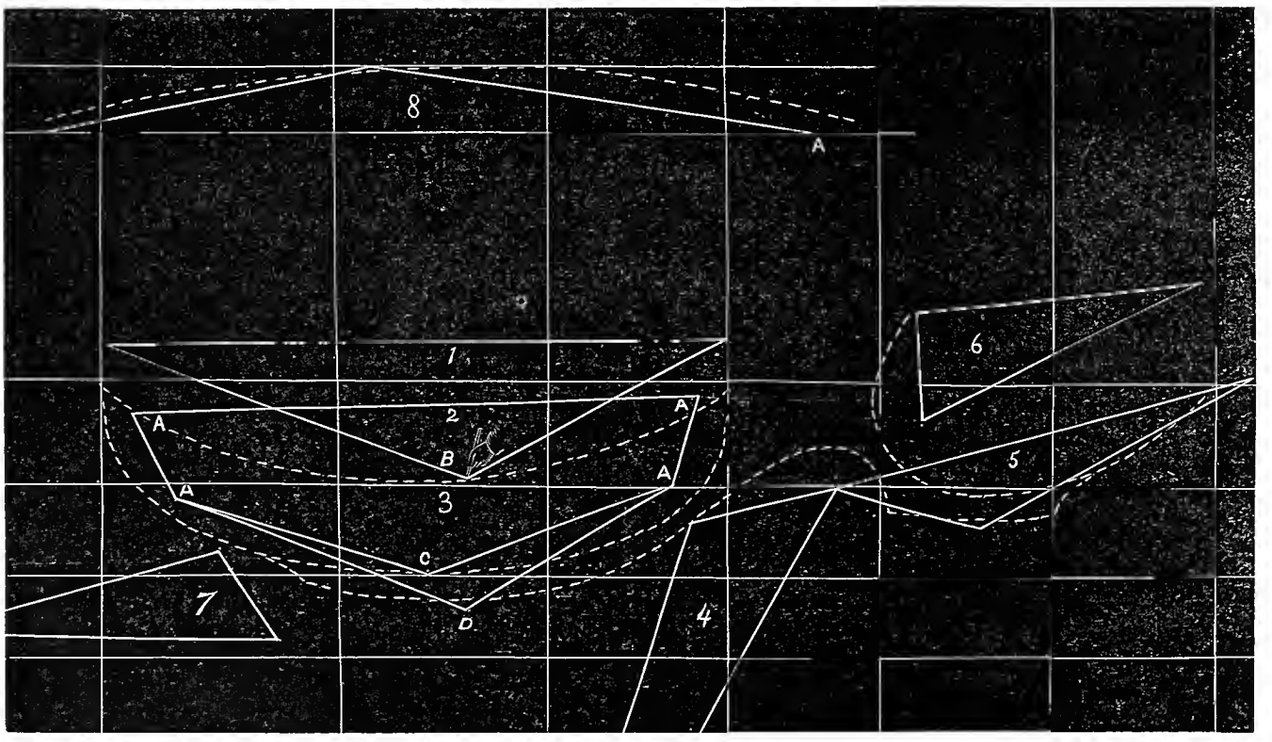
Another thing, in harnessing horses, is very often overlooked, even by those who *know* better, but who had not thought of it—the back band of the harness is adjusted just right to allow the traces to be straight when the horse is hitched to a carriage; but, when the whiffle-trees are six or eight inches lower, the back band will be found too short to allow the traces to be extended in a straight line. Consequently, the draught is so great downward that a sore back soon follows. Many good teamsters complain that their horses will have sore backs when they plow or harrow with them. The true reason of this has just been stated—the back bands were too short.

Besides the back bands, the "hip-straps," or, as some call them, "the lazy-straps," need to be adjusted to a proper length, in order to allow a horse to move with freedom. If they are of the proper length to receive the traces when a horse is hitched to a carriage, they will be quite too short when the same animals are hitched to anything where the whiffle-trees are but a few inches from the ground.

"Well, who don't know all this?" exclaims some wise one. I know not but every teamster understands this principle as well as I myself; but, if harnesses be examined in this respect, they will be found quite deficient in the proper adjustment of the length of hip-straps and other parts. When they are very long, they do not affect the draught one way or another; but when too short, sore rumps often follow; and should a team be plowing, they would tend to lift the plow too much from its proper position.

Now, that our team is properly harnessed, with the traces just long enough to allow the whiffle-trees to clear their heels, when traveling, we are ready for any kind of draught; and, in the next number, we shall pursue this subject, as applied to some other of the practical purposes of life, accompanied with some illustrations.

LAKE RIDGE, Tompkins Co., N. Y.



For the New York Coach-maker's Magazine.

NEW SYSTEM FOR DRAFTING BODIES.

BY F. J. FLOWERS.

THE operator having provided himself with a draf board, perfectly straight on the bottom edge, will be ready to commence his draft. In this instance we shall suppose our draft is to be a round-bottomed coach, as shown by the dotted lines in the diagram.

In the first place, draw the perpendicular lines, and afterwards those horizontal, these last to represent the true width of the door, the quarters, seat-drag, and dash; the horizontal lines showing the height of the arms, the width of the pannels, &c. This done, we next proceed to draw the pillars and the bottom-side. To give the body a good effect, it is necessary to have the front-quarter a little higher than the back one; and, as the points of the arms at the door and back-pillar should be horizontal with the top-rail, or bottom of the draft-board, we must make the difference in the bottom-side. This is effected by the position of the points, A A A A, as may be observed in the drawing, the two front points being higher than the back points. For our purpose we will take four brad-awls and stick one at each point at A A A A, as will be seen above. Around these we will fasten a piece of twine. Against this place a pencil as represented at B, and sweep the bottom-side and pillars as seen in the dotted lines.

Should the first sweeps be two bold or not in accordance with your taste, then alter the position of the brad-awls—and contract your stay until it does suit—to a fifth point shown at C. This will flatten the draft under the door, and make the sweep of the front-pillar bolder, while the back one will retain its original form.

The same plan may be followed with the sectional triangles seen in figures 2, 3, 4, 5, 6, 7, and 8, in our example.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

VII.

"LET us go and bring our horses up a little nearer," said the Professor, after we had secured our baggage from the storm as best we could. Picking our way slowly and carefully, we proceeded to the spot where we had hitched them. Just then a brilliant flash of lightning shot out from the clouds above us, rendering every object near by clearly distinct, followed by a terrific peal of thunder, that cracked sharp and clear as a rifle, and then ended in a succession of lesser reports. Taking advantage of the light, we glanced around for the horses, but none could be seen,—they were gone.

After procuring the pieces of rope that still remained attached to the stakes we returned to the fire. On examination we found they had been cut, instead of broken, which at once convinced us our horses had been stolen.

"No wonder the rascally red-skin sold that pony so cheap," exclaimed the Professor. "They must have followed us and skulked round in the bushes until we were asleep, ere they managed to get them. I wish I had them here,"—and he made a peculiar motion with his bowie-knife, which seemed to indicate that he would deal severely with them, if his wish had been realized. Throwing a blanket over his shoulders, he made the circuit of the fire, speaking rather disrespectfully of all Indians generally, but the Pawnees in particular, and exhibiting more anger than I had seen him manifest during all our journey previous; but he consoled himself, finally, with the idea of following the thieves in the morning and recovering our property.

The night passed, but slowly. Wrapped in our blankets to protect us from the rain, we walked around the blazing fire, stopping now and then to throw on some light fuel, and all the time conversing on some interesting subject to keep from yielding to the drowsy god, Morpheus. The long, dreary night passed by, and at last, after casting many anxious glances towards the east, the red streaks along the horizon's edge announced that morning had come. Loading our firearms afresh we started for the Indian village.

Proceeding up the river some two or three miles, we gained the top of a high hill, when our attention was directed to a thin, spiral column of smoke rising above a thicket of low trees down in the bottom before us. With slow and cautious steps we proceeded towards it, ready for any emergency. We soon discovered that our precautions were useless, for, on gaining a view of the fire, we saw it was deserted. On reaching it the indications of a hasty camp were visible.

"I understand it all now," said the Professor, after surveying the scene; "those red-skins came as far as this with their plunder, built a fire to keep off the wolves, and left at day-break. If we'd only known it,"—and he finished the sentence with a meaning look and motion of the head.

It was self-evident that his conclusions were correct, and we had proceeded but a few yards ere it was proven beyond a doubt. Crossing a ravine where some dirt had been washed down by the night's rain, we discovered the tracks of two horses, one with shoes, and the other the small, unmistakable foot-print of an Indian pony, while near by were the prints of several moccasins. Pressing rapidly onward we arrived in sight of the village about ten o'clock, when we stopped for consultation. "I am about broke," said the Professor earnestly, "and now, our all depends on obtaining the horses. Our best plan is to proceed at once to the Chief and present the case before him."

"I think that is best," replied I, "and as you speak French, you must act as spokesman, and I will see you out in whatever you undertake."

"Let us proceed, then," said he, and side by side we entered the village. Without noticing the women and children who crowded around us, we proceeded directly to the Chief's wigwam. Stepping in without ceremony we found the Chief with several of his braves seated in a circle, evidently intent in discussing some matters of importance, from the manner in which they were talking. Rising to his feet the old veteran approached us, and, after shaking hands, said, "Our white brothers return soon; has the Great Spirit frowned on them?" "No, but his infernal imps have," returned the Professor passionately; then checking himself, he continued in a milder tone, "let us smoke the Pipe of Peace, for we have some important business to transact." Joining in the circle, the pipes were filled, and, after smoking a few minutes in silence, the Chief signified his readiness to hear what we had to say. The Professor laid his pipe aside, and rising slowly, he surveyed the assembled group for a moment, and then addressed them as follows:—

"Let the Chief and braves listen to my voice, for the errand that causes us to return to your village is a serious one. When we visited you before, we smoked by your council fires, we slept in your wigwams, and we all ate from the same dish. When we parted with you we thought we were leaving friends, and we intended to write to our great father at Washington, and tell him how good and kind the Pawnees were. But now all is changed. The gallant steeds that bore us away from you so swiftly yesterday brought us not back to-day. Our feet are weary, for they have pressed the sod for many long miles since the car of the Great Spirit appeared in the east this morning. Our hearts are sad, for those we thought our friends have proven themselves our enemies."

He then narrated the incidents of the past night, and finished his speech as follows:—

"We placed all honor in the red man and we have been deceived. Our hearts are sorrowful and bad thoughts fill our minds. We came to have you assist us in recovering our horses, and in punishing the thieves. Unless justice is done us our father at Washington shall hear of all this. The great Chief of the Pawnees is too wise not to see the result. I am done."

I had never seen the Professor appear to better advantage. His fine form was drawn to its utmost height; his eyes were clear and brilliant; his voice full and melodious, and an exclamation of satisfaction ran round the circle as he took his seat.

Throwing the soiled blanket from his shoulders, the Chief arose and said—"Our pale-face brothers have met with a serious misfortune, and we are sorry. The eyes of the pale-face are heavy. We are ready to assist you in finding the horses, but we are innocent. The Omahas, the Pottawatamies, the Otaes, and the half-breeds are scattered along the hills. They are all thieves and steal. We are innocent. I have spoken."

On leaving the cabin, several young braves rode up, leading two ponies, which we mounted, and then we all started out. After scouring the prairies in every direction for several miles without finding the least trace of our missing property, we returned to the village, discouraged and disheartened. "It is as I feared," said the Professor, "they are all against us, and there is no use in prosecuting the search any farther. We'll have to make the best of a bad job, so let's get off from this place as soon as possible, else I might be tempted to do something serious."

After eating a light dinner, we engaged two young Indians to ferry us across the Platte in a canoe, when, bidding all good-by, we took our departure. On reaching the opposite bank we remunerated our dusky ferry-men with a lot of percussion caps and some smoking tobacco, then shouldering our baggage we struck off in the direction of Omaha. Crossing the broad, level bottom, and ascending the bald, barren bluff, we beheld the wild, boundless plains extending away to the north and east, without a sign of civilization. Our situation was not calculated to inspire us with gayety, therefore we trudged on in silence. Alone on the broad savannas of Nebraska, surrounded with wild beasts and savage men, and full seventy-five miles from the nearest squatter's cabin—it causes me to shudder even now when I think of it.

I have not the space nor inclination to follow our weary footsteps as we pressed on beneath the burning rays of a June sun, and then by star-light, until, completely worn out, we fell down on a knoll and slept until daylight; then another day's journey, when, just at dark, we arrived at a rude cabin, almost starving, and completely prostrated with weariness. It is all past now, but the sufferings of that day will never be effaced from my memory.

By noon the following day we saw the dome on the Capitol back of Omaha, with its tin roof glistening in the sun, and in another hour we were enjoying a good dinner at the Douglas House.

After passing an hour or two in looking for something to do without success, we passed over to Council Bluff—a distance of five miles, four of which is one of the lowest, muddiest bottoms imaginable. The following morning we both started out with the determination to find something to do during the day. There was no carriage-factory in town, but there was a wagon shop, and the idea presented itself that I had better try my hand at that business for the time being, so I proceeded thither. Seeing a young fellow at work I stepped up to him, when the following conversation ensued.

"Are you the boss of this establishment?"

"Well, yes, I s'pose so."

"Want a hand?"

"Well, no, guess not—hold on, though. Work at carpentering?"

"Yes, can do anything in the line, Sir."

"I've a small house I want to build, and if you've a mind to go at it I guess you can pitch in."

"How much?"

"I'll pay you just what I did the last jour. I had—a dollar a day and board."

"W–e–l–l, guess I'll try it, till I can do better," I drawled out, and after thinking over my situation for a few moments, I concluded that in coming West I had, to use a homely simile, "jumped from the frying-pan into the fire."

At noon I met the Professor, who had thus far been unsuccessful, but as I had something to do it cheered us up somewhat. On counting our funds we found that the sum total of four dollars and twenty cents yet remained in our possession.

The following day was Sunday,—as bright and beautiful as ever threw its halo of beauty over a Summer's landscape. The forenoon was passed in writing letters to distant friends, and after a good dinner we went up the bluffs to obtain a view of the surrounding scenery. One mile above town the great Mormon spring gushes from the foot of a high bluff, and after winding down through the deep ravine, its pure waters are lost in the muddy current of the great river. Slaking our thirst at this crystal fount, we commenced climbing the almost perpendicular bluff, that rose up two hundred feet or more, a great barren mass of sand and clay, destitute of everything save tufts of tall, coarse grass, on the sides. Finally, we reached the summit, weary with our journey, and seeking a clean, smooth sward, beneath the single oak that crowned the bluff, we lay down to rest and view the surrounding country, that was laid down before us in a panoramic view. The broad bottom below, with the river winding through dense forests of cottonwood; Nebraska with its gently receding bluffs and level prairies beyond; while Florence, Saratoga, and Omaha were plainly visible: such was the scene presented to our vision. Is it strange that the poetic fires, so long dormant, should rekindle in my soul as I lay there beneath that little oak on that lovely Sabbath afternoon?

A poem to be properly appreciated must be read under peculiar circumstances, such as is supposed to have surrounded the author when composing it, or at least when the mystic figures first impressed themselves on his mind. For instance, read Bryant's poem, "The Death of the Flowers," in the glad Spring time, when the violet blooms along the hedges and down in the warm vallies; when trees shoot forth their tender buds, and expand to leaves, forming dark green bowers beneath which we can wander at early morn, or dewy eve, and listen to the robin and thrush, as they warble forth their sweetest songs—you may read it then, but you can not appreciate its beauties. Again read it in Autumn,—in cold, chilly November, when the flowers are all dead, and the brown leaves are falling with every blast that sweeps by, when the song-birds have sought a warmer clime, and nought is heard above the "wailing winds" but the loud caw of the crow, and the harsh cry of the jay—ah, then you can detect the true spirit of poetry in the irresistible charm that steals through all the senses, as figure after figure presents itself so true to nature that one wonders why it was not composed centuries ago. Thus it is with all true poems; if we cannot place ourselves in circumstances suitable, we must at least imagine ourselves there and infuse the feelings of the writer in our minds.

I well remember once standing on the sea shore, when the waves came dashing in, springing like wild beasts far up the sandy beach, roaring and howling in the wildest fury, and involuntarily I broke forth with Byron's "Apostrophe to the Ocean." I had read it a thousand times before, and had committed it to memory in years gone by as a school-boy's declamation, but this was the first time I had ever understood it—ever appreciated its beauties; and for months afterward it rang through my mind like the lonely echoes of some long-remembered dream, and often when awakening from a troubled sleep I would repeat the lines—

"Man marks the earth with ruin; his control
Stops with thy shores."

It was only a change of scene that effaced them from my mind. If critics, those upas trees in the gardens of literature, would take this view of the subject, how many youthful poets would entrance nations, who now shrink back into obscurity when their first songs are ended, as they hear the cold sneer of the critic, or read the bitter words of ridicule from his venomous pen.

Pray, my dear friend, criticise the following verses in accordance with the above rule:

TO THALIA.

BEYOND Nebraska's lofty hills
The red sun slowly sinks from sight;
In yonder grove the whip-poor-wills
Give warning of approaching night;
And all is silent save the low,
Soft sound of waters murm'ring near,
That in a calm, and gentle flow,
Seems like sweet music to my ear.

Far down below, Missouri's tide
Is rushing toward the distant sea
A headlong torrent, deep and wide,
An emblem of humanity;
Now sparkling with a silver crest,—
Now dashing with a sullen roar,—
Then silently, as though to rest,
In gentle wavelets near the shore.

Above, below, where'er I scan
The wide, extending landscape o'er,
No sign nor trace tells me that man
Has trod these rugged cliffs before.
All, all is wild. Here Nature reigns
Alone in grand sublimity;
Her empire—hills and vales and plains;
Her subjects—every flower and tree.

Unto the lonely thoughts I speak;
No human voice gives back a tone;
The zephyrs only fan my cheek;
I feel, aye, *feel*, I am alone,—
Alone to muse,—alone to weep
The tears that loneliness beget,—
Alone to revel in the deep,
Dark thoughts of sorrowful regret.

Near where I sit a single rose
Nods gracefully as light winds pass,
And gaudy flowers in sweet repose
Are scattered 'mid the waving grass;
I love their rich and crimson hues,
Yet fairer far they would appear
With hills and vales and sunset views,
If thou, dear friend of mine, was here.

I'd love to wander o'er the plain
And ramble through the shady grove,
Feel the mild power of Nature's reign
And climb the hills, her throne, above,—
Give vent to all the thoughts I feel
That through my brain like lightnings fly,—
The secrets of my heart reveal,
And hear thy own sweet voice reply.

The grandest and the fairest things
That deek this wonder-girted earth,
The happy bird that sweetest sings,
The lonely flower of rarest birth,
The ocean with its field of blue,
The storm that mountain forests rend,
Lose half their charms unless we view
Their beauties with a cherished friend,

But why lament? each thought that fills
My soul 'twere vain in words to tell;
Ye mighty river, vales and hills,
I bid thee now a last farewell!
For I must cease and haste away;
I hear the gray wolf's howl afar,
Cold night has shut the gates of day
And sealed them with the evening star.

(*To be continued.*)

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

CHAPTER V.

AT last our turn came, and away we went under full sail. We met at the top, joined hands, and away we glided down the center as smoothly as need be. [Balance four.] I did my best in manufacturing "pigeon-wings" in a variety of styles, and was fast getting warmed up under the applause my efforts elicited, when, unfortunately, my foot caught in something, I lost my balance, and pitched forward with the force of a battering-ram. But here fortune relented, and interposed an object to stay my progress towards the horizontal—my head struck something soft—something that *grunted*—and I regained the perpendicular; but, there was a sharp concussion on the floor, and, to my surprise, I saw the form of Oversmasher stretched, heels up, thereon. As the painter bounced to his feet, I commenced an elaborate apology, but the words were lost in the hurricane of merry vociferations that greeted the *contre temps*. "Ladies chain!" was heard indistinctly during a momentary lull in the storm, and I was pulled and whirled, jerked and pushed indiscriminately, while one trilling, exuberant laugh rang through my confused brain with stunning distinctness. It was Maggie Gay's; and when, by a superhuman effort, I escaped from the chaos of dancers, the witch threw herself upon a chair and—*smiled* loudly—smiled until her pretty face was rose-colored, and great pearls of moisture hung on her long eyelashes, or ran races down her cheeks. If, as is claimed by the votaries of dancing, the art is a judicious admixture of healthful exercise and innocent amusement, I hereby commend the "Virginia Reel" as the *ne plus ultra* of terpsichorean gymnastics.

At the conclusion of the reel supper was announced, and I attended Miss Gay to the table. On leaving the parlor, we passed Mr. Horn, and I was again struck by the sinister look he cast upon us; this time the lady noticed it also, and remarked that his temper appeared ruffled to-night. When we were seated at the board he entered and took a place nearly opposite us; impelled by curiosity, I scrutinized his face closely, but detected nothing unusual thereon, save a sort of repressed twitching about the corners of the mouth and the eyelids. There was wine on the table, and he helped himself liberally to that, despite the playful reproaches of a lady who sat near him.

Henry Burnet sat a little further down the table, and was, to all appearance, making rapid inroads into the good graces of a handsome brunette who sat beside him. The same good feeling and gayety that had characterized the dance prevailed at the table, and each seemed to strive with their neighbor in enhancing the general enjoyment. Maggie Gay was in her element, roguish and clever, pungent and pathetic, but never insipid. Oversmasher was making himself both seen and heard. Horn was fast becoming talkative under the potent influence of sundry

"drinks" of "old port," and his ever-restless eyes were assuming an ugly glare that reminded me of a caged wolf. I noticed that his look often wandered to the face of my fair companion and dwelt there in an impertinent stare that annoyed her. This made my blood boil, but I felt that to even speak to him would cause an explosion, and that I wished to avoid, at least *there*. But my self-command availed but little; he was too drunk or mad to remember where he was. Filling his glass for about the sixth time,—and he must have noticed that his frequent libations attracted attention,—he leaned across the table and said, with a brutish leer—

"Miss Gay, here's to your (hic) health. I know your a great (hic) flirt, and aint got a heart bigger than a walnut; but (hic) here's to you, anyhow, and your feller, too; he's the tenth this (hic) winter, aint he? ha! ha!"

As he said "feller," he nodded significantly to me, and his tone throughout indicated that it was a premeditated insult to both. Leaning towards him, I said, sternly:—

"When a fitting opportunity arrives, I will learn you a lesson in manners you will not soon forget."

His only reply was a scornful laugh, and as Miss Gay was on her feet, pale but composed, I offered her my arm, and we left the room.

"You must not quarrel with that man, Mr. Bradly," said the lady, anxiously; "let his insolence pass this time—promise me that you will?"

I was about to reply, when Henry Burnet approached, and I saw by his clouded brow and flashing eye that he had witnessed the scene at the table. Before he could address me, I seized the opportunity to introduce him to Miss Gay, and thus turn the conversation into another channel, for I did not wish to commit myself to her with regard to Horn.

We talked a while on general topics, and as the parlors were nearly empty, most of the guests being yet at the table, I proposed to promenade as we conversed. We had gone the length of the apartments and were returning, when the door that led to the dining-room opened, and our host entered, accompanied by Horn. The faces of both were flushed, and Mr. Bright, after shutting the door, said, in an angry tone—

"Mr. Horn, I have called you in here to avoid a scene before my guests; you have grossly insulted a lady at my table, and now, Sir, I want you to leave my house instantly; and, I would also inform you, that hereafter I will dispense with your services at the shop—go!"

"Supposing I don't go until I get ready," said Horn, doggedly; "what then?"

"In that case," replied our host, furiously, "I shall put you out as I would a dog."

"*You will*, hey! Now try it, my little bantum—try it!" and he stepped back a pace, and drew from his breast a long-bladed "bowie knife."

I saw the act. With a bound I was by his side, and, planting my fist under the ruffian's ear, I felled him to the floor. His weapon flew jingling across the room, and ere he could regain his feet Henry and Bright seized him, and, dragging him to the front door, kicked him into the street.

The whole affair was ended so quickly that those in the dining-room knew nothing of the occurrence, and Mr. Bright begged the few who were in the parlor not to dampen the mirth of the occasion by mentioning it. "I trust, Miss Gay," he continued, turning to that lady, "that you will forget the indignity that scoundrel dared to offer you under my roof. I feel that I am, in a measure, to blame, for, knowing his ugly, *brutish* disposition, I ought not to have invited him here."

"Oh, it is nothing!" she replied, the color coming back into her cheeks; "his manner frightened me somewhat, but his words had no sting. Let us say no more about it."

It was well on towards daylight when I adjusted the shawl about the graceful shoulders of Maggie Gay, and left the scene of the festivity to escort her home. Henry accompanied us with a lady on each arm, and after depositing them safely at their homes and receiving pressing invitations to "call," we returned to the hotel, went to bed, and dreamed of reels, fair faces, and bowie knives.

The sun was at least two hours high when our heavy sleep was broken by a loud knocking at the chamber door. On my inquiring who was there, a voice answered:—

"Jones! Let me in, boys; I've something to tell you!"

I arose, slipped on part of my clothes, and admitted him.

"Beg pardon," he said, "for disturbing you, but I thought it would be best to put you on your guard before you venture into the street, for Horn is watching you, and will shoot you both on sight. He is drunk and perfectly wild; we have tried to reason with him, get him home to bed, or get his revolver from him, but without success. He swears frantically that he will have your blood, or die taking it. He also vows vengeance on Bright; says he would blow the top of the little dog's head off if he wasn't so small, but, as it is, he will cut his ears off and give them to the hogs. Now the boss can't bear to be twitted about being little,—he would rather be kicked any time,—so, when he heard of Horn's threat, he got raving mad, and loaded his double-barreled shot-gun with slugs so as to make a good fight for his ears. If Horn goes near him he is a goner, for the little man is game to the backbone. The hands in the shop were talking about the affair a few minutes ago, and Bill Brown, the 'smith,' said that as you were both from the North, it wasn't likely you had any *poppers* to defend yourselves with, and he wouldn't like to see you shot down like dogs. Well, we talked the matter over, and thought it would be nothing more than fair to put you on your guard, and fix you out with something to defend yourselves with; so they sent me over here to tell you how the matter stands, and give you these;" and he took a pair of Colt's repeaters from his breast and laid them on the table. "They are both loaded and capped," he continued, "and this one (pointing to one of them) *raises* at any distance over fifteen yards, so you must aim low for a long shot—don't forget that!"

I thanked him warmly for the interest manifested in our behalf by himself and the others, and told him that if I found it necessary I would use one of the weapons, but *only* to save my own life—only as the last alternative.

"So will I," said Henry, "'though I don't like the idea of killing a fellow-creature if I can help it. Is he a good shot?"

"No, not very," said Jones, "but good enough to be dangerous, and, when he is under the influence of liquor, he is perfectly reckless of danger to himself. He will be apt to come to close quarters with you, so my advice would be to blaze away as soon as you get your eyes on him. The law will clear you, for he has threatened your

lives, and no jury could be found to meddle with you even if you took a six-pounder and gave him a dose of grape at the distance of half a mile. This may sound strange to your northern ears, but it is the way we do things out here. There are scores of young men in this community that, had they been in your place last night, would have shot him on the spot, in place of simply plugging him under the ear; and then, just to think that it is all for Maggie Gay! why, there isn't an unmarried man in town but would willingly take the quarrel off your hands! aye, and some that I know of would give a thousand dollars for the chance. But you'll learn our ways after a while," he continued, smiling; "a fellow who is so handy with his fists will soon come to the bowie and repeater."

"Never, never," I said firmly. "I will defend my life to the bitter end when *assailed*, but in no other case will I ever use knife or pistol. I will always use Nature's weapons to redress my wrongs; depend upon it they are the best in the end, for few men can sleep well with human blood upon their hands."

"My sentiments exactly," ejaculated Henry, pulling on his coat and putting one of his weapons in his breast; "but let us go and see what the brute means to do."

I took the other revolver with a sigh I could not repress, and we left the room. The thought that it would more become us as Christian men to stay in our chamber and avoid the madman crossed my mind, but pride drove it back, and I followed my companions in silence.

"Where did you see Horn last?" queried my friend as we descended the stairway."

"Down between here and the shop," answered Jones. "You two had better keep this side of the street and I will take the other, for I don't want to be mixed up in the affair. Remember," he continued, "that pistol raises at more than fifteen yards!"

We descended to the bar-room, and, passing out into the street, went on towards the shop. It was quite evident from the meaning looks that greeted us on all sides that the threats of Horn had reached other ears than those of our shopmates; many who had passed turned and sauntered along behind, doubtless with a desire to witness the affray. About midway between the hotel and the shop there was a sort of grocery and bowling saloon that was a favorite haunt of the lower class of loungers about town, and in front of this place we noticed a group of men. As we neared them one of the party darted into the groggery, and in a few seconds reappeared with another person; that person was Horn. With a yell of rage he ran to meet us, drawing and cocking a pistol as he ran, and uttering the most fearful imprecations. The crowd scattered into the street to avoid the bullets, and we paused and drew our weapons.

"Let him fire first," I said, hurriedly, and then—

At that instant a figure darted past us shouting,—"Don't fire, gentlemen, he is mine first!" It was a mere boy, not over seventeen or thereabout, and he carried a revolver. Ten feet in front of us he halted, raised his weapon, and cried,—"Defend yourself, Dick Horn! *Look out!*" Four shots were exchanged in rapid succession, and through the smoke we saw the form of Horn totter and fall. The boy ceased firing and approached the body; we followed, and I shall never forget while I live the terrible look of mixed hate and mortal anguish that distorted the face of the prostrate man. The limbs were drawn up spasmodically towards the breast, the hands were clenched, the teeth set in a ghastly grin, and every muscle and nerve quivered in agony. I looked at the youth who stood calmly looking on with the still smoking pistol in his hand. His face was a handsome one, and the heightened color, flashing eyes, and distended nostrils became him well; but I shuddered to think that one so young should thus take the highest attribute of law into his own hands.

"How is this, Bob?" said a gentleman, approaching him. "What"—

"The scoundrel dared to insult my sister,—that's all," said the boy, with a dignity far above his years.

It is Maggie's brother, then, I thought, and that accounts for his strange interference.

"In that case you served him right," said the gentleman. "I admire your pluck, for it was handsomely done. I thought he was after those gentlemen behind you when I first saw him."

"Yes, he *was* after them, for they gallantly interfered in behalf of Maggie when the brute offered the indignity to her. I must beg your pardon, gentlemen," he continued, turning to us, "for taking this job out of your hands in so unceremonious a manner. I will see you again when this affair is ended. I suppose I might as well go and give myself up to a magistrate;—but here comes the doctor! let us see if he will survive."

(*To be continued.*)

For the New York Coach-maker's Magazine.

NOMENCLATURE AND SYSTEMATIC CLASSIFICATION OF CARRIAGES.

BY ROBERT LURKINS, ESQ.

THE intent of this paper is to bring before the Craft, for consideration, the necessity for, and principles of, a determinate nomenclature and systematic classification of carriages.

I hope the readers of the Magazine will pardon a momentary digression, while I say a word eulogistically of THE COACH-MAKER'S MAGAZINE. The principles of carriage construction are so varied and extensive that it requires the combined talent of the Craft to give them a development in any degree proportionate to their importance; and the objects to which they are applied being of indefinite variability, there is room for progress for the most expert. There is no good reason why any one should conceal his knowledge, lest his competitors should become equally skillful with himself. The truth is, individual knowledge is mental development; and the mind is developed equally as much in communicating ideas as in receiving them. Let the most ingenious communicate all he knows to as large an audience as you please, and when he has done he will probably be more the superior of his audience than he was when he commenced,—beside getting public credit for his superiority. Hence it is that communicating is a two-fold vehicle of mental development,—by direct action and by reaction; and no thinking man will dare deny that reaction is the most powerful in this case.

Since the carriage-making art is a progressive art, and complicated in its details, communication is necessary for its development. In raising the standard of art in car-

riage-making by free and open communication, it is absurd to fear that the art will become the prey of popular avarice; the effect would be the reverse—the high standard would make it unprofitable to employ tyros, except at prices which would not entice many of the necessity-driven or money-loving into its ranks. This desirable system of communication must, of course, be carried on through an appropriate journal; and its usefulness will depend on the generosity of the Craft, and a discriminating and faithful Editor. In THE NEW YORK COACH-MAKER'S MAGAZINE, I am satisfied we have these editorial qualifications, and every member of the Craft who is a lover of his calling ought to contribute his mite in support of a journal which is capable of doing so much toward raising his condition, morally, artistically, and scientifically, among his fellow-men.

Returning to the subject that I set out with: Every one who has paid any attention to the names of carriages must have noticed the indiscriminate use of the same name to very differently constructed vehicles. This certainly cannot be pleasing to those having a taste for system and order. I therefore propose the following classified nomenclature, and invite discussion as to its propriety:

Subject.	*Division.*	*Class.*	*Sub-Class.*	*Genus.*	*Varieties and Differentia.*
PLEASURE CARRIAGES.	I. Four-Wheeled,	I. Close (Coach).	1. Stationary Top,	Full Coach,	Clarence,
				Coupè.	Brougham,
			2. Movable Top.	Calash,	Branch iron front,
				Landau,	Rocker front, Extension side, Drop doors,
		II. Part open, (Covered,)	1. Full Doors.	Chariot,	Scroll quarter,
				Chariotee,	O. G. back,
			2. Skeleton Doors.	Rockaway,	Whittier, Jenny Lind,
				Cabriole or Cariole,	—et, —ee, &c.
			3. No Doors.	Top Wagon or Carryall,	
		III.		Barouche,	Oval Boot,
	II. Open,			Barouchet,	Boot Seat,
				Britzska,	Raised Seat,
				Sociable,	Arched,
				Phaeton,	Prince Albert,
				Buggy,	Drop front,
				Wagonet,	
	Two-Wheeled,	Chaise,		Sulky or Whiskey	Trotting,
				Gig.	Business, Tilbury, &c.

After having examined various books and catalogues of carriages, beside having made it a matter of personal observation, I offer the above tabulated nomenclature, on the ground of its adaptation to a distinct classification, and its general concordance with an *irregular* custom. I will make a few remarks in regard to the greater classes, and then describe, with as much distinctness as space will permit, the peculiar constructions intended to be represented by each generic name.

A generic classification is all that is necessary to be established, because the variety in names must be as changeable as fashion. The primary divisions need no comment. Class I., under Division I., include all those carriages of which the body proper can be entirely closed, leaving the driver excluded; these are generally called coaches, and may have either a stationary top or a moveable one, and have a name to correspond. Class II. includes all standing-top work, where the driver sits within the body; consequently, a part must be open; but they cannot be entirely open, being covered by a top. This class may be subdivided with reference to the doors. Those having full doors, with glass frames, constituting the genus Chariot; and those with skeleton, or half-doors, making up the genus Rockaway; while those of a tasty figure, without doors, may be called Carioles. Class III. includes all carriages with folding tops, only partially inclosing the inside; also those with no top.

Division II. is of but little importance; it may be said to contain but one genus at the present time, and that is the Sulky. A word in reference to the term *Chaise* may not be out of place. I have used it here to represent the entire class of two-wheel carriages. In Germany it is used for first-class carriages; in England it is more commonly confined to two-wheel carriages, although the post-chaise has four wheels, being a coupè fixed up for traveling.

I now come to the class of names which I should like to see established with precision as to signification—The *Generic* Nomenclature. It will be seen that I have not adhered strictly to custom in the application of names; I have been governed somewhat by older authorities and taste, but more especially by convenience. Order is said to be Nature's first law, and it is certain that it is the first act in scientific progress; therefore, if we are to have a carriage technology, to classify must be the first step; and I hope this will be taken in the spirit that it is given, and if any improvement can be made I shall be most happy to fall in with it. Space will not permit me to discuss the varieties of the different kinds, or *genera*, of carriages; and, by the time I have described in detail each genus, I shall have overrun the limits that will be allowed the subject.

The full Coach is too well known to require any description. Coupè, in French, signifies cut, and is used technically to signify a coach curtailed of its fore quarters.

The Calash is a coach, constructed with a movable upper front end and fore top, the back top being made to fold like a barouche; it is convertible into a close coach or a barouche, as convenience may demand.

The Landau is an old-fashioned sort of a barouche-coach, with a folding top in two parts, part to fold back and part before, and an extra fold hung on hinges to cover the door space. The bows forming the door-pillars stand perpendicular, and have grooves for the glass frames to slide up in, from the doors.

In the use of the term Chariot, I have, to some extent, departed from general custom, or, perhaps I might say, returned to an older one. In England, Chariot is the common appellation for a coupè; but as we use the French name for that, we may with propriety apply the term Chariot to a different construction. Rockaway being rather a homely term, good taste ought to restrict its use in some measure; but, on the contrary, it is now used indiscriminately to a very large class of vehicles, and one which admits of distinct subdivision. This division I have made; and selected from the catalogue of names that which seems most appropriate for each division.

Applying the term chariot to the heavier class of carriages, commonly known as rockaways, is not altogether a novelty. Mr. Adams, in his book on English Pleasure Carriages, describes a britzska-chariot, which was a similar construction to the genus that I now propose to apply the

name Chariot to. And many of us will remember the old chariotee (see this *Magazine* for December, 1860). Besides, the elegance of the name itself commends it for our list. I propose using the name for all three-seat standing bodies, having full doors, where the driver sits inside; and the name Chariotee to similar jobs with two seats only.

I propose to restrict the term Rockaway to standing-top bodies, having skeleton doors, or half-doors; and to let those having no doors at all be called Carioles or Cabrioles.

Cariole is a French term, corrupted from Cabriole; whence, also, is derived cab, and cabriolet. The original was a sort of a two-wheel coupè. The English transformed it into a sort of one-horse omnibus, for hackneying, to accommodate two passengers. The European cabriolet is simply a one-horse chaise, with a folding top. Cariole is a very common name in Canada, but I don't know to what vehicle it is applied. In placing it where I have, I presume I have done it no greater violence than it is accustomed to receive.

We now come to the consideration of open carriages, or those having folding-tops, or no top at all. Mr. Adams remarks that the barouche stands at the head of this class. The barouche-body is similar to the lower part of a coach. It has a folding top to the back seat, and a driver's seat entirely isolated from the passenger department. When there is but one seat within the body, and the driver's seat is isolated by a regular neck, and the body has doors, it is called a barouche.

The Britzska bears precisely the same relation to a barouche that a chariot, or chariotee, does to a coach. It has a top, generally extending over both seats, or the three seats if it has three. It has doors, and the driver sits within the body. The contraction for Britzska is erroneously spelled Brett,—it should be spelled Brit.

The Sociable is similar to the Britzska, but it has no doors, and it is generally lighter. It has an extension-top.

The Phaeton may have one or two seats, but no doors, and only one seat covered. The difference between a one-seat Phaeton and a Buggy is—the seat of a Phaeton is down between the sides of the body, while the seat of a Buggy is a distinct frame placed above the sides.

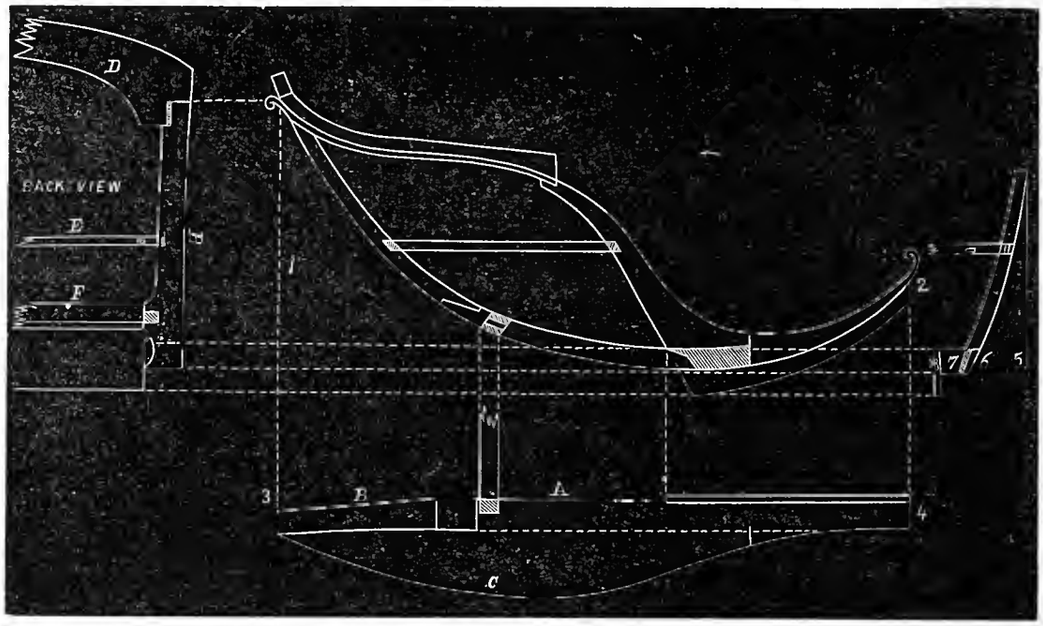
"A Buggy," says Mr. Felton, "is a cant name given to phaetons or chaises which can only contain one person on the seat." Formerly, a Buggy might have two or four wheels; at the present time it is the lightest of *four-wheel* carriages.

Of two-wheel carriages the Sulky is the only common representative. Mr. Felton describes the Sulky as being a Coupè, wide enough on the seat to accommodate one person only—hence its name; and what is now called a Sulky he calls a Whiskey. The latter term is decidedly most appropriate, were it not connected with the vile liquid of that name. The difference between a Sulky and a Gig is, that a Sulky will contain but one person, while a Gig will hold two.

I have now gone over all the regular pleasure carriages in common use. There are many other names, which do not belong to the present catalogue of fashionable carriages, but which I will describe at some future time, and also more minutely describe those already mentioned and their several varieties.

It will be seen that the terms in the table under "Varieties and Differentia," are placed indiscriminately as to their relations with the several *kinds* of carriages. They are given merely as examples of terms that may be used to express varieties, either differentially or nominally, as the inventor may think proper. Two names are required to express any special variety of a carriage—the specific and the generic. As Clarence Coach; round-side Calash; O. G.-back Chariot; Whittier Rockaway; Jenny Lind Cabriole; Drop-front Buggy, &c.

The whole is most respectfully submitted to the Craft at the pleasure of the Editor.



SKELETON CAB PHAETON WITH CANT-BOARD.—½ IN. SCALE.

ENGLISH CARRIAGE ARCHITECTURE.—No. VIII.

HAVING found the extreme length of the body, as shown between the dotted lines 1 and 2, and drawn the body, next proceed and lay down the cant on the board, as seen between figures 3 and 4 in the drawing. Next determine on the amount of the turn-under of the sham-door, as shown from 5 to 6.

The thickness of the rocker is shown at 7, and the bottom-side at 8.

A designates the inside of the bottom-side; B, the back-pillar; C, the elbow-line; D, the back-rail; E, the seat-rail; F, the back-bar. The parts B D E F compose a sectional view of the back of the body.

HARD TIMES.—We learn that, in consequence of the disturbed state of national affairs, the greater portion of the carriage-manufactories in New Haven, Rahway, &c., are closed for the present.

Pen Illustrations of the Drafts.

UNION BRETT.

Illustrated on Plate XXIX.

This original design for a new style of brett will not fail to meet the wants of some of our readers. The united back-scroll and pump-handle are a novelty sufficient to warrant us in the use of the adjective we have applied to this carriage. The dusters at the side are but a renewed application of an old institution, which, in an open carriage, are very necessary. Some may object to the style adopted in the elevation of the dickey-seat, as being too much in the European fashion; such will modify it to suit their own fancy.

SIX-PASSENGER CALECHE-TOP ROCKAWAY.

Illustrated on Plate XXX.

Many of our readers desire something plain and economical in the line of passenger-carriages. Our beach-wagon, calculated for three seats, may serve such a purpose. It is without a perch for short turning, and with a calash-top on the score of economy. The Gipsy-top serves to keep away the mud from the fare, and the stick-seat might be improved in some cases by the substitution of a paneled-seat instead. One advantage in the top such as here used is, that it may be removed altogether, at the pleasure of the traveler.

DAYTON PREMIUM BUGGY.

Illustrated on Plate XXXI.

It is with no ordinary degree of pleasure that we present this original and unique style of a buggy to the notice of our readers. At the late Ohio State Fair it was "the observed of all observers," and seems to have won the admiration of every visitor. For it the designers and manufacturers, our friends Messrs. J. M. Watters & Bro., of Dayton, O., obtained the premium over all other carriage competitors.

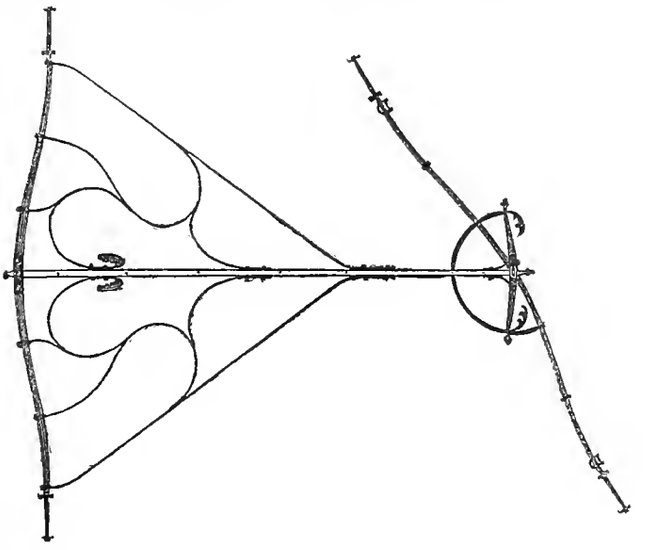
The construction of the body and other parts are so decidedly novel, that a detailed description is judged necessary to a full understanding of the subject. The body, as may be observed on inspecting the drawing, is very light, with a boot of a globular form, covered over with patent leather. A seat surmounts this, set on silver-plated standards, secured to the body with silver-headed screws. The dash is also circular, as well as the axles, springs, &c., for an illustration of which see the next column.

The Carriage-hire for the Japanese, on their late visit to New York, cost the city $8,000, which would be about $10 a day for each carriage, supposing there were sixty. Was ever any community so shamefully swindled as our tax-payers?

Sparks from the Anvil.

CARRIAGE-PART OF THE DAYTON BUGGY.

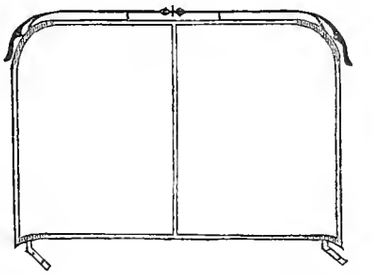
This design introduces the carriage-part of the very fine buggy exhibited by the manufacturers, Messrs. J. M. Watters & Bro., at the Ohio State Fair, held at Dayton



in 1860. These peculiarly shaped axle-trees, are made to conform to the shape of the body to be found on Plate XXXI. of this volume. The scrolls of the fifth-wheel have much labor bestowed thereon; and the wing-stays are very much complicated, and calculated to try the patience of a very skillful workman. The scroll-ends to these stays are also made to correspond to those on the fifth-wheel.

The Dash of the Dayton Buggy

likewise presents some original and tasty features, which warrant us in giving it an illustration in connection with its other parts. The scroll-work, as with the fifth-wheel and perch-stays, terminate with foliated ends, in wrought iron, and are plated with full silver. This dash is circular to the depth of three inches. An end-view, giving some idea of its circular form, may be seen in the dash, as connected with the drawing on the plate above referred to.



PUDDLE STEEL.

A case, involving a question of great interest to all manufacturers of iron and steel (in England, at least), has just been decided at the Liverpool Assizes. For some time past a metal, denominated "puddle steel,"—a species of steel produced directly in the puddling-furnace,—and

of great commercial value from its strength, lightness, and cheapness, has come into very extensive use, the right of producing the article being confined to the licensees of a deceased patentee named Reife. An extensive manufacturer named Spence, in Workington, Cumberland, having produced this puddle-steel, and he not being a licensee of the patentee, an action was brought by the representatives of the licensors to recover damages for an alleged infringement of the patent right. On the part of the defendant, a number of scientific and practical witnesses were examined, for the purpose of establishing that the supposed invention of Reife was not a novelty; that for many years antecedent to 1850 (the date of the patent), the principle of manufacturing puddle-steel had been actually in operation, not only in Styria, but also in various districts of Staffordshire and Yorkshire; and that the alleged discovery of Reife was practically acted upon long before any claim to the invention was put in by the patentee. So strong was this evidence against the novelty of the invention, that before the termination of the case the plaintiffs agreed to be nonsuited.

THE BLUEING OF STEEL.

THE various colors on articles of steel are produced by the degree of heat to which they are raised after being polished. After being ground and highly polished, the articles to be blued are placed on an iron plate and subjected to a temperature of 500 degrees Fah. for a light blue, to 550 degrees for a full blue, and 600 degrees for a dark blue. The cause of the blue color thus produced is supposed to be the absorption of a small quantity of oxygen from the air while the metal is exposed to the heat.

HARDENING STEEL DIES.

GREAT care is necessary in the hardening of these instruments. They should only be heated to a cherry red heat, then set slightly inclined, and a stream of cold water (from a height of thirty feet) admitted to fall right upon the middle of each. The water for hardening should be kept in an elevated reservoir, and conducted to the die through a nozzle of a size proportioned to the article to be hardened. This method has been practiced by very successful die-makers.

Paint Room.

For the New York Coach-maker's Magazine.

LESSONS IN PRACTICAL COACH-PAINTING.

BY F. W. BACON.

(*Continued from page* 151.)

BEFORE proceeding any further with these Lessons let me earnestly enjoin upon you the great importance of observing neatness and order in the paint-room; for you may be assured that you cannot do even a decent job if you allow dust to collect, and sticks, shavings, and rubbish to accumulate in the paint-shop. The rooms should be swept at least three times a week, if circumstances will admit, and cans, paint-pots, brushes, sponges, chamois leather, and, indeed, every thing should be laid in its proper place. Different workmen have different ways of keeping their brushes. I will here give you my manner of keeping paint-brushes. The way to keep pencils, varnish-brushes, &c., shall be given in their proper place.

Procure a trough, or box, three or four feet long, six inches deep, and four or five inches wide; fill it half full of water, and suspend your brushes therein on stiff wire running through a hole in the handle and resting on the edges of the trough,—taking care not to let the end of the brush rest on the bottom, nor the binding to extend below the surface of the water. The white or light color brushes should be placed at one extremity, and the darker shades following in regular order, and so on throughout. By keeping them in this manner you may know precisely where to place your hand on any brush you want, without having to search through the entire collection. I have been into paint-shops where the brushes were kept in old kegs; the hair had become bent and twisted in every direction, some bursted and others gummed and hard at the ends, so that it was impossible to find a brush among them fit to use. But to the subject:

The paint-mill, muller, and slab should be thoroughly cleaned as soon as you are done using them. They should be attached to a bench or counter contiguous to the paint-shelves. Directly beneath keep a box of currier's shavings, covered by a box three inches deep, in which you will place your mill in order to clean it. When you have occasion to use paint that has become skimmed over, take a pallette knife and cut around the edges of the color; then take hold of the intrusive skin in the center with the thumb and finger, and you can effectually remove every particle without wasting any color or staining the fingers in the least. These remarks may seem to some to be trivial and unnecessary. Perhaps they are. But we know that there are many painters who will not be injured by conforming a little to these suggestions.

It is a popular maxim among painters that "a workman is generally known by his personal appearance." But bear in mind that it is not safe to depend too much upon this as a general rule. By the reader's permission we will here relate an anecdote pertaining to the subject, showing that "*appearances are often deceptive.*"

It happened that the proprietor of a certain carriage manufactory in "York State" was sadly in want of a good painter. He searched and inquired for one for some time, but his efforts proved fruitless, or, rather, *painterless*, till one fine morning a "jour" came to the place in search of a job, and was at once directed to our worthy proprietor, who proved to be one of those who prided himself on understanding "human nature," and believed a great deal in personal appearances.

"Jour" asked him, very modestly, "if he had hired a painter yet?"

Boss answered that he had not, and added, in no very choice language, that he did not think he would suit him, for the "jour's" clothes manifested some signs of having been in contact with a paint-shop, besides other signs of slight neglect of personal appearance. At this rebuff our knight of the brush grew red in the countenance, and quickly left the "diggins."

In a few days after this occurrence our "boss" was somewhat surprised to see several livery carriages come out in new dresses, splendidly ornamented, and as smooth and bright as a polished mirror. Meeting Jehu, the owner, he inquired who painted his buggies.

"Oh!" says he, "there was a fellow came along and offered to paint them at a pretty low figure, and, as they needed fixing up, I set him to work, and he did so well that I gave him five dollars extra."

"What sort of a looking fellow was he?" asked the "boss," beginning to "smell a rat."

"Well, as to that, yonder is a better description than I could give you, for there he is."

The "boss" turned in the direction indicated and saw the identical "jour" who had applied to him for work. Not doubting but that he could easily engage his services, he approached and immediately offered him the situation of "head painter" in his establishment.

"No, sir, thank you," said he; "it might happen that I should spoil some of your work, and get it thrown on my own hands, and, as I am a poor man, I do not feel able to take the responsibility; besides, I am offered a good job in the next place, and I leave town on the first train. There goes the whistle. Good day, sir!" So saying, he left our friend, the "boss," gazing after him a few moments, completely nonplussed. Finally, turning to his companion, he remarked, "Well, I declare, *that fellow has more pride than I took him to have, after all!*"

LESSON II.—Leading the Carriage Part.

When the work comes from the blacksmith arm yourself with chisel, file, and sand-paper. Cut off all the slivers, rasp the rough places, such as blisters made by fitting the iron, &c., and smooth the whole wood work with sand-paper. This is necessary in order to cut down the raised grain, which there will always be to a certain extent, and it must be attended to on the start. If there are any smoked spots on the work do not rest till you have entirely removed them. This is easily done, by wetting a cloth in turpentine and wiping the spots. If it is not done it will damage the whole job, for you can never make paint dry on smoke or tar. I have seen the paint all pealing off down to the priming by varnishing work that had been painted over smoked places. Having the work clean, smooth, and well dusted, lay on your leading color freely and evenly, commencing with the wheels. The way to paint a wheel is by painting the backside first. Coat the two sides of the spokes, then the inside of the felloe, then the hub and back of the felloe. Go around to the face, and finish in the same way,—using a small "fitch" for painting the hub between the spokes. Paint the connecting gears with the same pains that you would take in putting on the last coat.

To make superior leading:—Take ground white lead and put in black enough to make a dark lead color, and twice as much red lead as black. Mix pretty thick, with equal parts of boiled oil and turpentine, and add a little japan.

After the first coat of leading is dry, all holes, cracks, and rough places must be neatly filled with putty which is made as follows:—One part white-lead, two parts whiting, and one part red lead. Mix to the proper consistency with oil and a very little turpentine and japan. If any part of the work is "eaty" (slivered), thin the above with turpentine so that it will almost run, and you can fill the very *brush tracks* with it. It must be used from the pallet, or something equally adaptable, and applied with a square-pointed putty-knife.

For common work, three coats of leading is sufficient, but if it is very rough it will require more. It is not necessary, in any case, to smooth with sand-paper, after the priming, until the last coat is dry, and you wish to color the carriage; you must be careful, however, not to let your leading coats dry too hard; if you do, it will take a good stock of "elbow grease" to sand-paper the work. Forty-eight hours is sufficient time for a coat of paint to dry. I suppose that some of the knowing ones will turn up their nasal appendages at the above remarks, but I can assure *wisehead* that it is worse than useless to sand-paper each coat of leading before putting on another. Who ever heard of rubbing down each coat of "roughing" on a body? Yet the principle is the same in both cases, and it is just as much required on the one as on the other.

When the last coat of leading is dry rub it thoroughly with No. 1 sand-paper, and then with curled hair, or moss, after which dust it clean. Grind the coloring very fine, mixed with boiled oil, one part, and turpentine, two parts, —adding japan enough to dry it in twenty-four hours.

Two or three coats of this coloring, well laid on, are sufficient. For the last coat of coloring some painters use "color and varnish," but it is a poor plan, inasmuch as it is liable to crack, especially if the varnish used is not of the best quality. Besides, if there is a little too much turpentine or japan in the color it is sure to work "ropy," and make a rough job of it. We will now let our carriage part rest a while, and in the next number I shall "take up" the body and bring it along through the "mysteries" of finishing.

COACH VARNISHES.

Messrs. Stimson, Valentine & Co., of Boston, whose advertisement will be found in the appropriate place in this work, stand high in reputation and responsibility as reliable varnish manufacturers, and all who have visited their establishment can but be pleased with the system that accompanies their whole business.

This enterprising firm received the silver medal for superior Varnishes, at the late Mechanic's Fair, in Boston, and have since been awarded the same premium by the Directors of the Maryland Institute, whose exhibition has just closed at Baltimore.

We are glad to see sound and honest enterprise thus rewarded, and doubt not that they will receive liberal patronage from consumers of the article, who, in all trials of their manufacture, we feel assured, will be perfectly satisfied. Our New England friends cannot do better than to send them their orders, and rely on being satisfactorily supplied.

ORIGINAL ORNAMENTAL DESIGNS.

Illustrated on Plate XXXII.

With this number we give, somewhat in variety, a number of designs for scrolls, &c.

No. 1 is from the facile pencil of our friend, Mr. David Aikin, of Greensborough, Ala. He gives us the following directions for shading:

The base to imitate marble. The rim of the tea-tray, or waiter, should be painted white and shaded with ivory-black; edge the same with chrome yellow. Paint the pitcher and flower-vase of a stone color; the glass white, shaded with raw umber; fruit and flowers to imitate

nature as closely as possible. The engraving has been done by Miss S. A. Grant, of the Cooper Institute School of Design.

No. 2 is a beautiful scroll, expressly designed for this Magazine by our generous and talented correspondent, Mr. F. W. Bacon, of Fostoria, O., who furnishes the following instructions for coloring it:

The beast may be painted with yellow ochre, shaded with raw umber, and heightened with Naples yellow. It may then be diversified with spots, as in the leopard, or left plain, at the option of the painter. The scroll surrounding the animal should be done with ultramarine and white, shaded with purple, and touched up with white; the wrong, or under sides, dark green. Paint the end scrolls vermillion and white, shaded with carmine, and touched up with orange-mineral; the reversed sides purple, the end leaves, or extremities, chrome yellow, shaded with ochre, and touched up with white; the drapery buff, touched lightly where it runs through the scroll, so as to show transparent. Let this be shaded with orange and carmine, and touched up with Naples yellow and white.

No. 3 is a corner-piece for the side of a Phaeton, or Rockaway, contributed by Mr. H. H. Isgriggs, of Allensville, Ind. We are told that the scroll may be painted to suit the operator's fancy. The shield should be painted red and white, in stripes. When properly done this design looks well. These last two have been engraved by our regular engraver, Mr. Redman.

Mr. Geo. P. Tinker writes us that Mr. Isgriggs is a young hand at drawing, but, in the hope that we will make all proper allowances, he sends this design with the desire to contribute something to our enterprise.

We would improve this opportunity to thank the several gentlemen who have so considerately put it in our power to furnish so creditable a plate of designs for this work, and would invite others of like talent to send us some of their original designs for a future number, which, if accepted, will be duly credited.

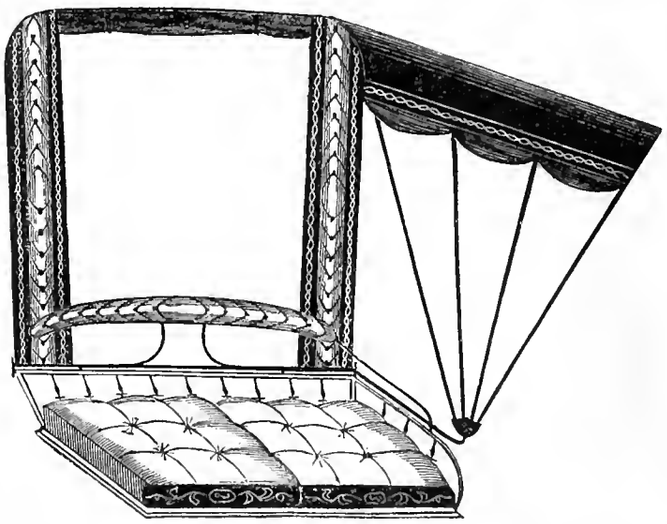
Trimming Room.

SNAKE-SKIN LEATHER.

THE man who declared there "is nothing new under the sun" would, in our day, be deemed an old fogy. On the contrary, there are so many novel things *now*, that we are prepared for something new every day of our lives, and to receive it without much agitation. Leather, which has now been manufactured from almost everything, including *shavings*, has finally been obtained from the skin of the snake—the last thing supposed to be of any earthly use. A Frenchman, Dr. Jules Cloquet, of the French Academy of Sciences, has the honor of its introduction to practical purposes, from the skin of the boa-constrictor. It is said to be remarkably strong and supple, and, when tanned, has *a scaly* surface, which renders it highly *ornamental* for trimming *fancy* carriages, and would not be unsuitable for the *jackets* of some "scaly" individuals we have in our mind's eye. Who says there is nothing new?

DESIGN FOR TRIMMING A BUGGY.

THIS design is intended to represent a very pretty style of trimmings for very light work. The lazy-back and the inside of both valances are formed in what is called herring-bone work. In the valances, each side is



bordered by strips of machine-stitched patent-leather, in white; the effect of which, with the herring-bone, is very tasty, when the workmanship is neatly executed. A strip of patent white stitched leather in the sides of the top and fronts of the cushions supplies the place of laces. In our design silk sun-curtains are used.

OUR TRIMMER FRIENDS, who are in receipt of this work in consideration of their promises to furnish us with matter for this department of our Magazine, are reminded that we shall expect them to be more attentive to our necessities, or we shall be obliged to erase their names from our book, however painful it may be to us. We are decidedly in favor of a *quid-pro-quo* mode of doing business.

BLACKING FOR HARNESS.

TAKE beeswax, 2 pounds; ivory-black, 2 ounces; Prussian blue, ground in oil, 1 ounce; turpentine, 1 ounce; copal varnish, ¼ of an ounce,—and melt all together in an earthenware pipkin until thoroughly mixed. The wax should be first melted, and the other ingredients added gradually. Before the mass becomes quite cold make it into balls, and use by rubbing a little upon a brush and applying it to the harness. Polish lightly, with an old silk handkerchief.

The New York Coach-Maker's Magazine.

FEBRUARY 1, 1861.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

BOUND VOLUMES *of this work are sold, singly, for* $3.50 *per vol., or Vols. I. and II., when purchased together, for* $6.50. *The two volumes, bound (including the subscription for the third year), will be furnished for* $9.50. *The three volumes, in numbers, will be sent for* $8, *when ordered. Single volumes, in numbers, will be sold for* $3, *or any single number for* 25 *cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for* 25 *cts.), can be had at this office for* 44 *cents. When mailed (the postage on which we prepay),* 55 *cents. Any volumes left with us will be bound for* 75 *cents each in our uniform style.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

"G. W. B., of Ill."—No work on coach-painting has ever been published that we are aware of. You will find much on the subject in the volumes of this work, complete sets of which may be had.

"J. P., of C. W."—A man *mean* enough to saddle us with *his* postage would not be too honest to "cheat the printer,"—a character not very desirable in one seeking an agency with our publication; we therefore decline employing you.

"J. C. W., of O."—Who asks us "to oblige a man who has been in good circumstances, but who, after getting property working at the carriage business, went to selling goods and lost it all," and who is "very poor now, or he would send the money with his letter," is informed that our terms are *cash in advance*, dealing with "richer or poorer" all alike.

"R. P. T., of Mo."—The price per set for spokes is $3.30; oak rims, $1.75; hickory, $2; hubs, $1.12.

STREET RAILWAYS IN ENGLAND.

FOR about twelve years horse-cars have been employed on street-railways in America, in conveying passengers from one point to another in the larger cities. In this matter we have far outstripped the old world, and organized an "institution," to be deprived of which would be voted a great calamity at this time. The present prospect is that this mode of travel will, in a few years, drive out of our larger cities everything in the shape of those "old rattle-boxes"—the omnibus.

During this period of a dozen years, however, in England, the conventional habits of the people against any change, and the opposition from parties whose interests were likely to be injured by their adoption, have served to smother anything like improvement in that direction down to the present time. It is very doubtful whether this "masterly inactivity" would not have still continued on, had not that energetic specimen of a live Yankee from Boston, Mass., Geo. F. Train, Esq., undertaken the task of introducing this "American notion" to the attention of the Londoners.

It is really amusing to an American to find our countryman—just as he would have to do with a parcel of school-boys in other departments of learning—reading to the grave members of the British Association, assembled at Oxford, such *lessons* as this:—"In America a car is drawn by a pair of horses. The tramway is laid in the center of the street, and the obstruction is so shallow that it offers no obstruction whatever to carriages crossing it. In wide streets two such tracks are laid down, one for the going and the other for the returning traffic. In the cities of America the system is in constant use, and is now an absolute necessity there. I see no difficulty in carrying out the system in the English towns, or in London. Where there are inclines, an extra horse can be used; and where a street is not wide enough for two tracks, a single one could be laid, and the traffic brought back on another track laid in another parallel street. I have received a concession to bring out my system in Birkenhead, and hope, by September, to have it in operation there. All I require is permission from the authorities in any town to lay down the trams and to run the carriages."

We say it is amusing to find this staid British Association, in order to learn, compelled to listen to this simple recital of how the Yankees do things, and of which they are stupidly ignorant—or, if not entirely ignorant, of which they have but a vague idea—from Young America. But, from the tone of our foreign exchanges, which are supposed to reflect somewhat the tone of public sentiment, we judge that, in this case, from the force of utility, prejudice against everything American will, from necessity, be compelled to give way; and even John Bull, instead of traveling through the streets of London with his coach-and-four, will soon be found transporting his gouty old carcass from one end of the metropolis to the other in such plebeian conveyances as the horse rail-car. What effect such a revolution will have upon the profits of the Herald's College we are not advised; but, in view of the fact that an English equipage "is altogether incomplete" without a coat of arms, we suppose, from a parity of reasoning, that should the rail-cars lessen the number of private equipages now in use in that fossil-land, "the College" and the "Crown" will suffer accordingly.

Before these railways become generally adopted, we make no doubt that England, as on many previous occasions, will struggle hard to rob us of any originality we may claim in their introduction. Already the *Practical Mechanics' Journal* has begun the task, "because, at the present moment, a good deal of stir has been made by Mr. G. F. Train, who has been warmly pressing upon parochial bodies the subject of street-tramways;" and one "Mr. Thomas Wright, C. E., of George Yard, Lombard Street, London, proposed to relieve the streets of London from the enormous and increasing, as well as dangerous, traffic, by laying down two lines of rails flush with the surface of the road," *nearly* ten years ago, and

the Editor is "desirous to see justice done to Mr. Wright's claim, which has so long lain in abeyance," although, as his forced charity leads him to say, "we have no desire to detract in the slightest degree from the merits of Mr. Train" in this matter.

Now, Mr. Wright, as our cotemporary asserts, either did or did not agitate this subject of street-railways "*nearly* ten years ago,"—we shall assume that he did a few years ago; but why has the subject been so long neglected, at a stand-still, while our own country has been making such rapid strides in that direction? Simply because Mr. Bull did not see, with his eyes closed in prejudice, that the security, facilities, and other advantages derived from the adoption of street-railways would far outweigh those offered by the confused, irresponsible, and dangerous system of omnibus-conveyance, still continued in London and other cities; because it takes "this fine old English gentleman, *all* of the olden time," ten years, at least, to adjust his spectacles,—and by the time they are adjusted, he has become so blind that his flat glasses *are too young for his age.*

This old gentleman having now *heard* that G. F. Train and S. C. Bidley, two enterprising Yankees, were about to lay down the rails for carriages in Edinburgh, Glasgow, and some other cities, seems to be about coming to consciousness, *a la* Rip-Van-Winkle-like; and we are told that application will be made to Parliament this session for powers to be granted to a Street-Rail Company (limited) to lay down rails and plates upon the streets of the metropolis, *and other towns*, and to keep the road between and beside such rails in proper repair. The intended act "will reserve to all persons entitled to use such streets or roads the right to run over, upon, and along the said rails and plates, when laid down, with all ordinary road-wheels and carriages; but will reserve to the company the exclusive use of flange-wheels adapted to run on an edge-rail as laid down." When this is consummated, we hope the "lower classes" will have less use for such books as "How to Walk the Streets of London," and the poor plebeian mechanic consider himself as made of flesh as good as that enclosing the blood of a lordly aristocracy. We know of no means more likely to accomplish this end, in England, than the universal adoption of horse rail-cars.

NAMING CARRIAGES.

NAMES, for convenience in distinguishing one object from another, are absolutely necessary, as every one must admit. These act the part of wires in telegraphing the ideas of one mind to that of another in conversation; but, when these names,—once confined to a particular form of carriage,—have become so extended as to represent a class, confusion will be very apt to spring up, except where great care is used in supplying a name, adjectively. This we have been aware of ever since we commenced the publication of this journal, and, therefore, have been very careful to avoid calling a coach a brett, or a phaeton a gig. But, with all our study, we have finally fallen under the censure of some of our readers, as will be seen in friend G. R. G.'s letter, on page 158 of this volume.

Were we disposed to cavil, we might begin by saying that "a rose, by any other name, would smell just as sweet,"—that a Rockaway, with the prefix *Skiddy* or *Louisiana*, in either case, would not alter the draft; but this would not satisfy our critical correspondent, nor remedy "the growing evil" which he complains of. "We must be very careful how we act, and give the credit to whom it is due, so as to do justice to the original designer;" although our correspondent seems to despair of our ever being able to entirely cure the evil.

Only about thirty years ago the entire catalogue of designs for carriages might be summed up in a few words, so limited was the variety in this country; and such is the case now in Europe, comparatively speaking. In the "old country," where progress—*Festina lenta*—"makes haste slowly," these distinctions in class are easily maintained; but in this land of magnificent distances, threaded as it is with railroads and magnetic wires, a misapprehension in variety and name will be very likely to occur, notwithstanding all the care we may use. Every shop will "adopt a new name for a new style," although "not original with them;" and when this is done, who is to apply the remedy? It may not always be in the power of this Magazine, for the presumption is that the correspondent knows better than the Editor the true name for *his* draft; and even did he not, on the score of friendship we must exercise prudence in the alteration. We think, however, we can discern a ray of hope in the distance—sunshine breaking through the clouds.

On page 168 of the present volume the reader will find an article from our intelligent correspondent, R. Lurkins, Esq., on the "Nomenclature and Systematic Classification of Carriages," which very opportunely comes in the shape of an intended remedy for the "great evil," likely to continue to be contagious, unless checked in time; but whether his "learned composition" will act any better than as a palliative, time alone can determine. Our correspondent invites the criticism of his readers on his classified nomenclature, and, understanding that, if wrong, his greatest wish is to be set right, and that withal he is a reasonable man, and not likely to take gentlemanly criticism unkindly, we will be happy to hear from such of our friends as may differ from him. This being the first attempt at classifying the different varieties of carriages now made, as far as our knowledge extends, we think it will be perused with much interest by every lover of the Craft.

IRON CARRIAGE-WHEELS.

Among our list of patents will be found one for "an improvement in carriage-wheels," which consists in constructing wheels entirely of metal for pleasure-carriages, "affording the greatest possible strength, *with no more weight than when made of wood.*" How this is done we are not told; and until we have better proof of such being the fact, we shall take the liberty to dissent from any such belief. This kind of wheel does not, like some other patents, possess even the recommendation of novelty in its favor. We happen to know something about iron wheels, and something about carriages for the road entirely of that metal, and, from experimental observation, the result of their use.

About fifteen years since a company was formed and established in Harlem—then in the suburbs of New York—that was expecting to revolutionize the entire carriage business in this part of the world. No doubt they would have used up everybody in the trade had they realized their dreams, and not used themselves up. Like many other *heavy* undertakings, it "caved in," with a large stock of *carriages* on hand, because that notional old customer, the public, did not chose to "invest" in this kind of *light* wagons. There were two or three individuals, however, who "went in" for them; but a few miles' riding put the spokes something in the shape of some we have seen in cast-iron machinery, of the spider-leg order, more ornamental than useful, and not answering for either purpose. The spokes this Company used were of three-eighths round-iron, and the least resistance from obstructions on an uneven road and centrifugal force in traveling soon spoiled them. In short, the first trial reduced their value to the price of scrap-iron, and the company soon "exploded," for the lack of patronage.

We do not know how it is in all cases, but our own observation leads us to believe that all "*improvements*" of this class in carriages emanate from some *outsider* who knows as little, practically, about a carriage "*as a horse does about his grandfather.*" This is not written with the object of discouraging the free exercise of inventive genius, but in the hope of turning ingenuity into a more reasonable channel, and preserving some brainless wight's pocket in a degree of fullness, above a starvation point.

LITERARY NOTICES.

The Illustrated Self-Instructor in Phrenology, with over one hundred engravings, a new edition, revised and enlarged, has just been published by the Messrs. Fowler & Wells, of this city. Sold for 30 cents in paper covers. This unpretending little volume is designed to teach learners those organic conditions which indicate character, by condensing facts and conditions, rather than by using elaborate arguments. Its pages embody all the recent discoveries in the science of which it treats, and crowds into the fewest words just what all learners need to have, in order to find the key to that knowledge which shall open to the mind of the student a correct understanding of the character of his fellow-man. Whatever to the contrary skeptics may say of the science, we have no hesitancy in affirming that a correct knowledge of Phrenology is worth more to a young man just entering into business for himself than a moderate capital; it will furnish him with that which is absolutely necessary to success,—a judgment which years of experiment might fail in supplying.

Superior to the London *Punch* is our witty and spicy cotemporary—*Vanity Fair*. As a remedy in curing a "fit of the blues," so prevalent in these days, no better expenditure of $3 could be made than by subscribing for it. To an American, no publication of its class presents so much matter calculated to interest him. A new volume commenced with the year. L. H. Stephens, Pub., 113 Nassau St., N. Y.

That sterling work, *The Atlantic Monthly*, commenced its seventh volume with the number for January. The publishers appear determined to leave nothing undone which may contribute towards maintaining in the public mind that popularity it has so deservedly earned by the originality and value of its literary contents. The paper, too, on which it is printed, is of a very superior quality Published by Ticknor & Fields, Boston, Mass., at $3 a year.

Life Illustrated, is a weekly family newspaper published in this city by the well-known firm of Fowler & Wells. To the lover of pure literature, that from the reading of which a person rises a more intelligent and a better citizen, we earnestly commend this publication. There is in its Editor some qualification that peculiarly fits him for his task; for the more we read his paper, the more we value it,—a recommendation wanting in some of our weeklies. Subscription price, $2 a year.

ERRATUM.

In the letter we gave on page 159, from Mr. Lurkins, occurs the following passage: "Formerly bodies, instead of being constructed with a curved side-surface, had their sides to consist of three *perpenplanes*, making," &c. For "perpenplanes" read perpendicular planes.

EDITORIAL CHIPS AND SHAVINGS.

A Literary Cab-driver.—A prize of $20 for the best essay on the effects of Sunday cab-driving has been won by John Cockraun, a London cab-driver. At the meeting at which the prize was awarded, Cockraun told his audience that the essay consisted of 19,000 words, and all was written on the top of his cab and in the open air.

THE FIFTH-WHEEL OF A COACH.—In our reading we often find such passages as the following, which we copy from the letter of a correspondent of *The World*, for Nov. 3:—"Soon a large boat, pulled, or rather scudded, by ten or twelve naked natives, came off towards us, and, in a few moments, we had the pleasure of receiving on board his Imperial Majesty's pilot for the port of Hakodadi,—a functionary *as useful as the fifth-wheel of a coach*,—and, as far as his directions for steering were obeyed, he might as well have stayed on shore." The inference in the above extract is, that a fifth-wheel to a coach would be useless; and this is but a specimen of the *knowledge* displayed by a large portion of literary men, when they attempt anything of a scientific nature. The old adage "As useless as the fifth-wheel of a coach" has so beclouded their intellectual horizon during their school-days that the more effulgent sunshine of riper years has not been sufficient to dispell the darkness upon their minds. Such is the force of education. For the benefit of these ignoramuses, we say that a coach without a fifth-wheel would prove an anomaly, and be "altogether incomplete;" in fact, there would be no more turning about without one than there is to a locomotive. The reader seeking for further information on this subject will find it on page 89 of this volume, under the head of "Sparks from the Anvil."

LAW OF THE ROAD.—In America, when persons in carriages pass each other on the road, going in opposite directions, the law directs that each keep to the right hand; but, in England, it seems that the law is exactly the reverse, respecting which a punster propagates the following:

> "The laws of the road are a paradox quite,
> For when you are traveling along,
> If you keep to the *left* you're sure to be *right*,
> If you keep to the *right* you'll be *wrong*."

Among us, however, when two carriages are traveling in the same direction, the law is varied. Section 2 of chapter 77 of the New-York Revised Statutes, reads thus:—"If the driver of a carriage or other vehicle passing a carriage or other vehicle traveling in the same direction, shall drive to the left of the middle of the traveled part of a bridge or road; and if a bridge or road is of sufficient width for the two vehicles to pass, the driver of the leading one shall not willfully obstruct the same."

THE HUB OF THE UNIVERSE.—We hear a great deal said in these days about "the hub of the universe;" and a cotemporary goes so far as to say, "It is fair to presume that the universe ain't a *one*-wheeled carriage." He might have added, it is not a *one*-"hoss" concern neither. Taylor, the Water Poet, as our readers have already been informed on page 105 of this volume, many years since told us that "*the world runs on wheels*." Perhaps these last were "a wheel within a wheel" and didn't require but one hub. Can any of our intelligent readers explain how the term at the head of this article originated?

TRAVELING BETWEEN ARKANSAS AND NEW MEXICO.—The road in this route was opened in 1823, since which time there has been a steady increase, until the present year. The amount of travel this season over the route is given by a mercantile firm at Council Grove, a town about two hundred miles west of the Missouri line, as follows:—Men, 5,984; *wagons*, 2,170; horses, 464; mules, 5,933; oxen, 17,836. In 1859, over the same route, men, 5,495; *wagons*, 1,532; mules, 4,377; horses, 360; oxen, 12,545; all employed in the Mexican trade. The value of goods passing over this road yearly exceeds one and a half million of dollars.

GREASE FOR CARRIAGE-AXLES.—Take half a pound of sal-soda, and dissolve it in a gallon of water, just at the boiling-point, then add 5 pounds of tallow and 6 of lard. and stir the whole together until they are well mixed, An iron vessel is the best to use for this operation. When these ingredients are thoroughly amalgamated, the vessel should be taken off the fire and its contents stirred until the compound has become cool. A very good and simple grease for the axles of carts can also be made by stirring half a pound of powdered black-lead in six pounds of melted lard.

NOTES AND QUERIES.

CARRIAGES TAXED BY CONGRESS.—In the *Historical Magazine*, for December, there is a letter from John Pintard to David Longworth, dated Newark Prison, 16th of July, 1798, in which reference is made to the "Carriages which pay tax to Congress." Can you, Mr. Editor, or any of your intelligent readers, inform me what description or class of carriages were so taxed, and how much?

LEX.

LONG AND SHORT PERCHES.—*Mr. Editor:* It is the popular opinion that a carriage with a short perch will run easier over an uneven road than it would with a larger one. Can you, or any of your correspondents, prove the truth of the popular theory from scientific deductions?

S. A.

SPIDLER CARRIAGES.—In the *Carriage-Builders and Harness-Makers' Art Journal*, Part XI., I find a drawing of what is there called "an American Spidler Carriage, such as is common in New York and other American cities." Now, I am an old member of the Craft, well acquainted with New York City, and have traveled quite extensively through many of the States comprising this Union, and yet I confess I have never seen a "Spidler," such as is there given, nor have I ever heard the term connected with an American carriage before. Where can such a thing be seen?

KNICKERBOCKER.

[We confess we are as much "under the cloud" as our correspondent, having never heard of *the animal* until

we saw *him* in the Journal. We presume that *the* "Spidler" given in our cotemporary emanated from the Editor's distorted brain, and pronounce "the whole concern" a libel on the Craft in this country. The form of seat there figured has been out of fashion with American carriages for eight or nine years, and the style of axle altogether foreign to American tastes. Evidently, the Editor of *that* Art*ful* Journal has either been "sold" by some facetious correspondent, or himself undertaken to dupe his English customers.—Ed.]

The Coach-Maker's Letter-Box.

LETTER FROM OHIO.

Cincinnati, Dec. 24th, 1860.

E. M. Stratton, Esq.—*Dear Sir:* I claim having made an important improvement in what is commonly called "the French rule," which improvement I wish to submit to those members of the Craft who are competent to judge of it.

In "sweeping off" a body by said rule, the side-surface is absolutely determined from two given curves—the top-rail and standing-pillar. In some styles of bodies this does not seem to take off enough from the bottom-side and corner-pillar at their connection. This makes the lower quarter look somewhat flat, and the sweep of the bottom-side and corner-pillar uneven, which is not so pleasing to the eye as it would be were the lower part of the side swelled more than the upper. This, I suspect, most body-makers have noticed; at least, some take off from one to three eighths of an inch in places below the regular surface, to obviate this unsightliness.

Should this statement be admitted, I claim a positive improvement in the rule above mentioned, by introducing a third curve, which can be made to produce the required surface through any arbitrarily determined point in the bottom-side; thus giving the lower part of the side a greater curvature in a horizontal section than the upper part contains; or the reverse, if required. This can be applied with the same number of movements as in the common method, or with less, by a simple mechanical contrivance. If this will work as I say, is it an improvement? or, is there no necessity for such an application?

As a general thing, the application of geometry for obtaining the swell of a body, I believe, is not perfectly understood; at least, its application to the arm-rails does not seem to be. In all the applications which I have seen, the same line which represents the outside of the top-rail is made to represent the outside of the arm-rail in the horizontal projection. This is geometrically incorrect, the arm-rail being modified by the curvature of the standing-pillar. I admit that a case might be given where a side having considerable swell,—and yet the arm-rail might be of the same thickness through the whole length of its upper or lower edge,—and, at the same time, its face might be parallel with the face of the bottom-side. But, in ordinary cases, the common method is a near approximation; but it is not exact, neither can it be laid off exactly by the ordinary measurements, for the line representing the face of the arm-rail does not occupy a position corresponding with its place in the frame; and this throws the transverse lines, on which the measurements for thickness are made, out of their true position, which is perpendicular to the plane of the face of the bottom-side.

By some, these errors may be said to be too insignificant to merit consideration; but it must be remembered that "Geometry is an exact science," and will not admit of the least departure from its principles; and if we do depart from them, we are working on the "*cut and try*" method; and if a piece of stuff goes home evenly to its place without fitting, it is the result of chance and not of science; besides, it is easier to adhere strictly to science, when its principles are understood, than it is to approximate and guess at the difference.

Yours, respectfully, R. Lurkins.

LETTER FROM ALABAMA.

Mobile, Ala., Dec. 26th, 1860.

Mr. E. M. Stratton.—*Dear Sir:* Your Magazine is getting to be an "indispensable favorite" among the Craft in this vicinity, and I think it only needs to be seen in order to be appreciated. The mechanical departments are invaluable to the craftsman; yet, in my humble estimation, it excels in its literary contents. Mr. Scott's "Siftings" are excellent, and we only complain when we miss our monthly portion. Do give it to us regularly, for we are interested.

Mr. Williams' "Clarence Clifford" is unexcelled in its line. I have read the chapter in the December number over half a dozen times—each time with renewed relish. Some of the thoughts therein would reflect credit on our ablest writers. And here let me ask for information. There is a dispute among us as to the author being "one of the Craft,"—some concluding that he is, others that he is not. A tramping painter here some time since said that he knew him as an Editor in Ohio. How is it? and where does he live? Please answer these questions, and thereby settle our differences in opinion.

Yours truly, H. S. Donoho.

[In answer to our correspondent, we will state that the author of "Clarence Clifford" *is* one of the Craft, and a creditable specimen too, such as many of our readers may become should they rightly improve their leisure hours in cultivating the faculties of the mind by study. If he was ever an Editor in Ohio, we are not knowing to the fact. He is of age, however, and can speak for himself. Without abuse to confidence, we will add that Mr. Williams' letters to our "Box" are correctly located. We will indorse all our friend has asserted of "Clarence Clifford," and trust that our readers will still further be favored with the productions of his facile pen.—Ed.]

EXTRACT OF A LETTER FROM ENGLAND.

Newcastle-on-Tyne, Northumberland, Dec. 21st, 1860.

E. M. Stratton, Esq.—*Sir:* We have taken The New York Coach-maker's Magazine from its commencement, and have been much pleased with many of the articles, and think it will tend to improve the taste of carriage-building in America. There are, also, many useful hints for carriage-makers at large. We feel certain that great advantage is to be derived by the interchange of ideas, and we are glad to find that two or three mediums have

been commenced. Your Magazine is a very important one, and we hope it may receive increased support.

We are, sir, yours, &c., Atkinson & Philipson.

[The above extract we find in a private business letter, but having some interest for our readers, as showing the opinion entertained of our journal among English carriage-builders (from whom we have received several letters of like import), we are induced to give it a place in our "Letter Box," in the trust that our correspondents will pardon us in the liberty we have taken to publish that not originally designed for the public eye.—Ed.]

TIGHT TIMES.

1st Carriage-maker.—(Hic) olloa, Bob (hic), 'smity *t-ti-tite* times with (hic) us now, haint it (hic)?

2d do.—Y-yas si rec (hic); 's'bout's *t-ti-tite* as I ever seed.

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

[Reported expressly for the New York Coach-maker's Magazine.]

AMERICAN PATENTED INVENTIONS.

*** To Inventors.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

December 4.—Improved Tuyere Iron.—C. H. Edwards, of Vergennes, Vt.: I claim the improvement or use of the ball, E, attached to a suitable shaft, F, provided with openings or passages, one or more, which extend entirely through it, and placed in the relation with the bed or plate, B, and wind chamber, D, as shown, to operate as and for the purpose set forth. I further claim arranging the shaft, F, of the ball E, in such a way that a weight, G, may be placed on said shaft, to operate as and for the purpose specified.

Improved Harness Trace.—Edmund Mayher (assignor to himself and M. M. Wilcox), of New York City: I claim the described new and improved article of manufacture—the same being an elastic harness trace, formed of a textile fabric composed of the materials substantially in the manner set forth.

Improvement in Road Wagons.—J. W. Lawrence (assignor to Henry Brewster, J. W. Lawrence, and J. W. Britton), of New York City: I claim attaching the side-bar to the body of the wagon by a rigid central and two elastic supports, when the side-bar is so formed that it may have elasticity between the central and side supports, as set forth.

Dec. 18.—Improvement in Carriage Wheels.—J. P. Fisher, of Rochester: I claim the combination of the binding rods, *c*, with the hollow spokes, *s*, hub H, and felloes, *f*, in the manner shown and described.

Improved Fastening for Hame Tugs.—J. W. Church, of Cold Water, Mich.: I claim the combination of the self-locking, perforated slide, with the perforated bed-piece, in the manner and for the purposes substantially as shown and described.

Improvement in Horse Collars.—John Ende, of Buffalo, N. Y.: I claim the manner in which the clips, G G, Fig. 4, and hold-back rings, D D, Fig. 1, are attached, as described, for the purpose set forth. I also claim the peculiar construction of the lock, H I, Fig. 1 and Fig. 2, in the manner and for the purpose specified. I also claim the arrangement of the welt seamed in with the pad, and the seam covered by the hames, as described and for the purpose set forth.

Improvement in detaching Horses from Carriages.—Solomon Kepner, of North Coventry, Pa.: I claim the combination of the bar, figure 9, and the revolving singletree, with its two hooks and guide, arranged as described for the purpose set forth.

Improvement [additional] in Couplings for Thills to Axle-trees.—James Saddler, of Egremont, Mass.: I claim the substitution of the axle itself for the permanent bolt whereto, in my original specification, the clasps connected with the spring coupling were designed to be attached, thereby doing away with the band and clip and bolt ordinarily attached to the axle. [This is the most simple and efficient invention for the purpose designed, yet patented. We hope to present it more fully to our readers soon.—Ed.

RECENT EUROPEAN PATENTED INVENTIONS.

June 11.—Vital de Tivoli, Stanley Place, Pimlico.—Improvements in civil and military ambulances.

August 1.—Ebenezer Patridge, Stonebridge, Worcester.—Improvements in axles and axle boxes.

3. John Stephens, Augusta Place, Lyncombe Hill, Bath.—Improvements in the arrangement of wheeled carriages, to facilitate the movement on soft or uneven ground.

September 8.—John J. C. Kleinfelder, Paris, and Charles Girardet, Vienna, Austria.—Improvements in carriages and harness for horses, and in the means of attaching harness to carriages.

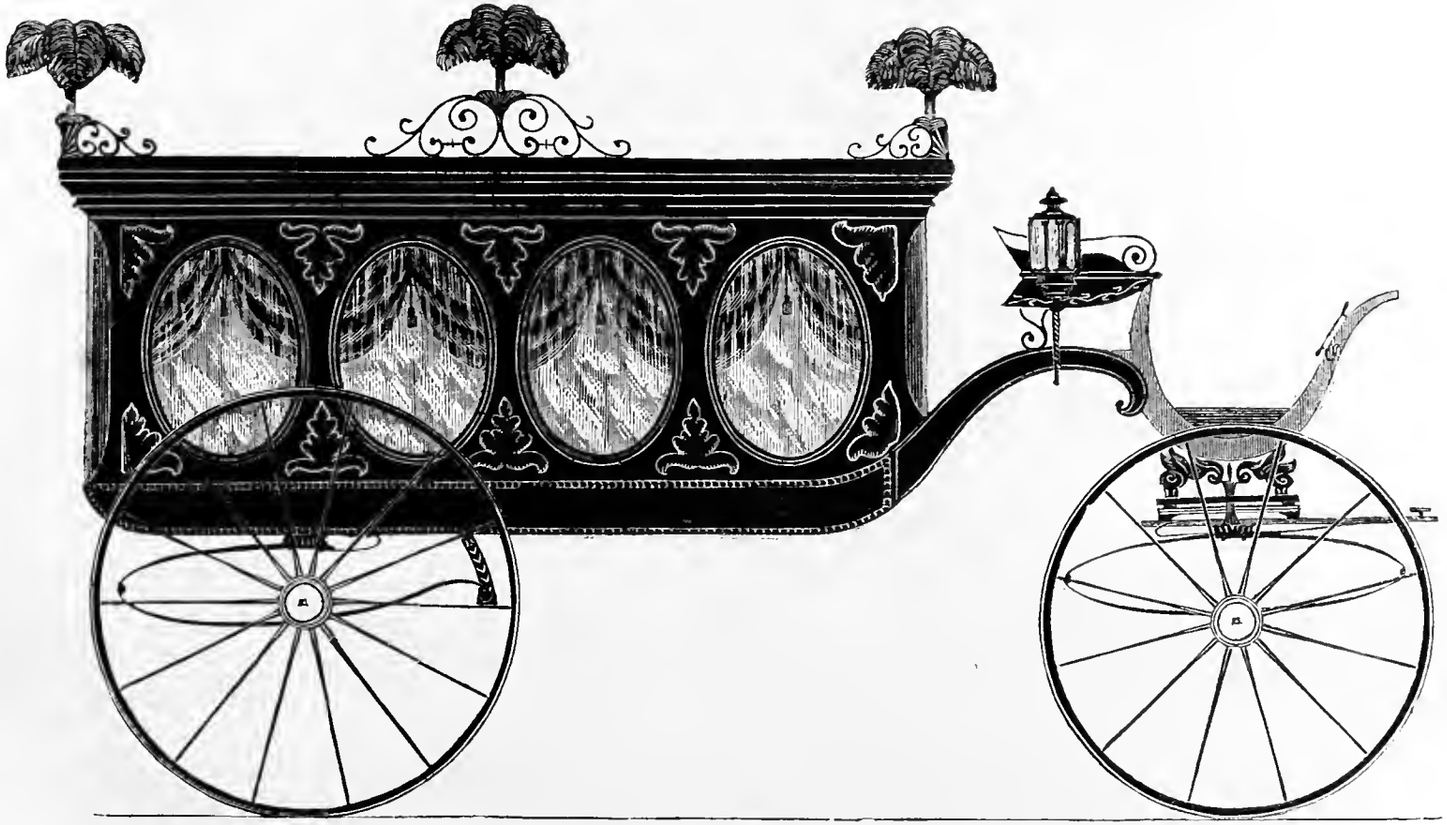
10. Charles Seward, King's Clure, Southampton.—Design for a smith's forge.

22. James B. Mannix, London.—An improved wheel, to be used for carriages and other purposes.

27. John H. Johnson, Lincoln's Inn Fields, London.—Improvements in rolling and forging metals, applicable to the manufacture of wheels, axles, &c.

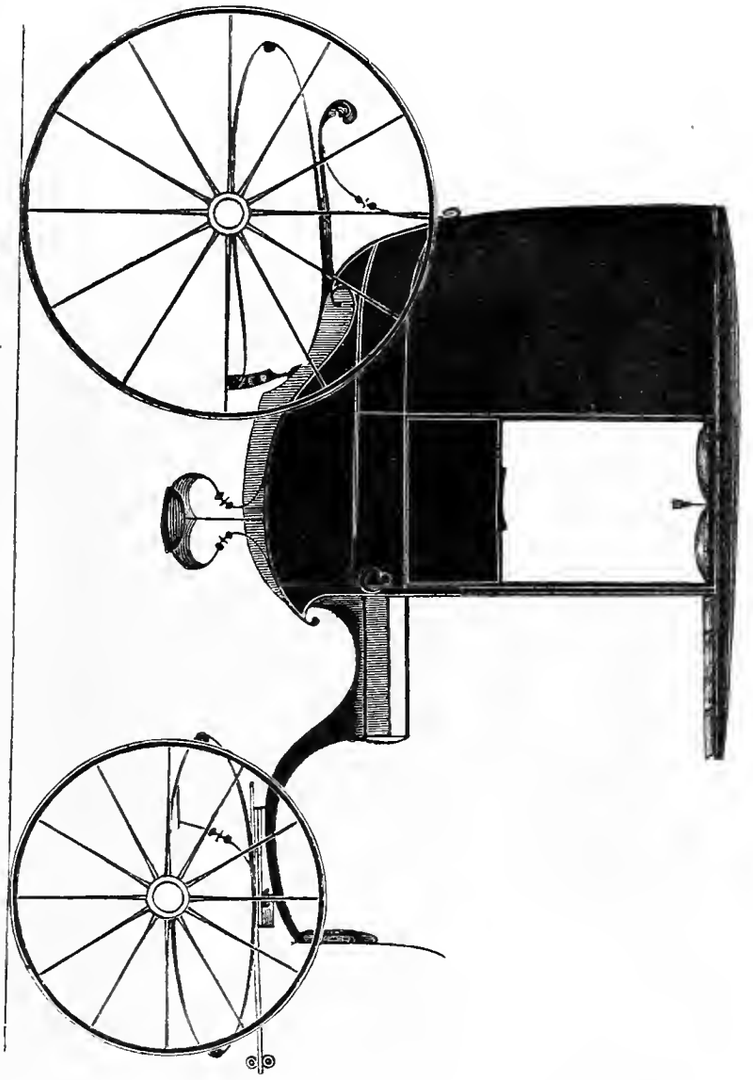
October 3.—Richard J. Cole, Pembridge Garden, Bayswater.—Improvements in ornamenting the windows of public and private vehicles.

8 James Henson, Parliament Street, Westminster, London.—Improvements in the manufacture of chains for connecting carriages, wagons, &c., on railways.



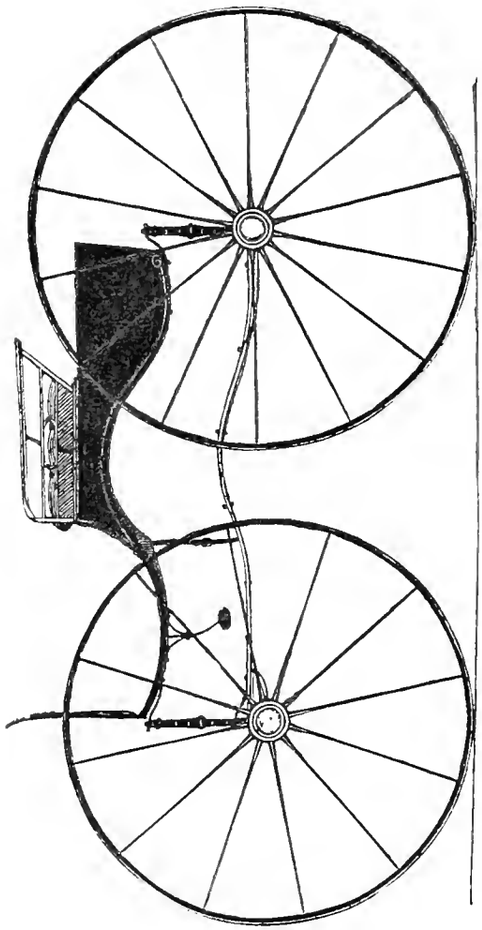
MESSRS. J. A. & H. F. LOGAN'S HEARSE.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 190.



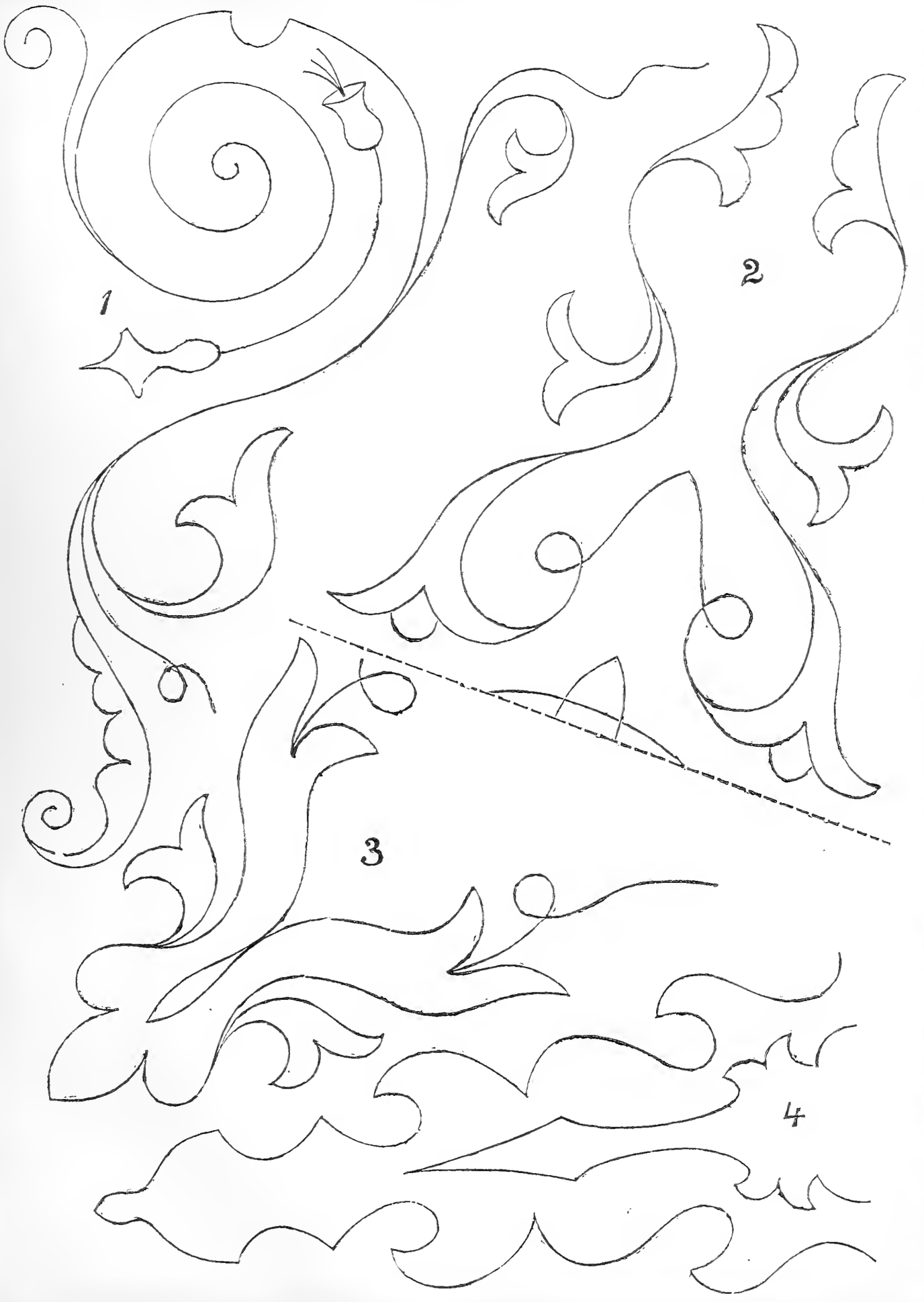
COUPÈ ROCKAWAY.—$\frac{1}{2}$ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 190.



HERMAPHRODITE BUGGY.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 190.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THE NEW YORK
COACH-MAKER'S MAGAZINE

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, MARCH, 1861. No. 10.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

PRINCIPLES OF DRAUGHT.—No. II.

BY S. EDWARDS TODD, ESQ.

How to hitch with a rolling or a sliding hitch, and how it affects the Draught—Principles of Draught in the manufacture of Sleighs.

One very important consideration in hitching to a draught of almost any kind is, to understand the difference between a *rolling* hitch and a *sliding* hitch; and this idea is to be kept in view, and should be practically understood, not only in the manufacture of *wheel* carriages, but in vehicles which *slide along*, like cutters and sleighs; and in handling and hauling timber and stone; and in the manufacture and use of most of the portable machinery which is used in the country. By a *sliding* hitch we mean that a team is hitched to a draught *below a point which is in a direct line from the center of gravity in the draught to the shoulders of the team.* For example:—When a good teamster desires to haul a large stone, or, in common parlance, "to snake it," he runs his chain from the team *always beneath* a stone, log, or stick of timber, whether he desires to take a *sliding* or a *rolling* hitch. This will be made more intelligible by the accompanying figure 1, which will fully describe a principle which every carriage-maker should thoroughly understand.

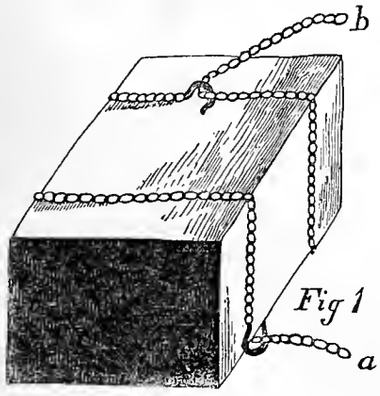


Fig 1

The figure represents a stone with chains around it, preparatory to *snaking* it with a team, or rolling it over, as the case may be. At *a* it will be seen that the chain is passed *under* the stone, and the hook fetched around and hooked *around* the chain,—not into a link,—clear to the lower corner of the stone. At *b* the hook is on the *upper side* of the stone: or, one chain is hitched to draw *above* the center of gravity, and the other *below* it.

Now, every good teamster, who is accustomed to hauling such materials,—if he does not know that there is such a thing as the center of gravity,—will assign *two* very correct and philosophical reasons for hitching the chain, as at *a*, when he wishes to slide, or snake a stone, or such like body. One reason is, when hitched as in the figure at *a* the least possible strain comes on the hook of the chain; and another is, the least possible force of a team, which is sufficient to move such a weight, will start it; whereas, when hitched like *b*, a heavy strain comes on the hook, and the point of draught being *above* the center of gravity, the tendency is to roll it over towards the team, and, as a sure consequence, the friction is so great at the forward side of the draught that a team which could haul a stone, when hitched to it as at *a*, could not move it one foot were the chain adjusted as at *b*.

There is another thing which is not to be overlooked in this figure, to which allusion has already been made in the preceding article, which is *the inclination of the traces*, or draught chain. Let a team be hitched at *a*, as near to it as they can be, and not hit their heels, and if they are able to just move it, if the chain be lengthened eight or ten feet they cannot move it; and, allowing, for the sake of argument, that the friction would be the same whether the team were drawing at *a* or *b*, a team would be much more fatigued in hauling a draft a given distance, when hitched at *b*, than they would be when hitched at *a*, for reasons already assigned. From the foregoing considerations, we shall be able to understand more perfectly the

Principles of Draught in the manufacture of Sleighs.

There are quite a number of conditions and collateral considerations to be taken into the account when we treat of principles of draught in the manufacture of cutters and sleighs. A rule that is correct for *one* sleigh, or cutter, *may* be very far from being right in another, unless they are made of exactly the same shape and size. All the rules which I have ever seen laid down for making every part correctly, are sometimes right and sometimes wrong. In *theory* they may be philosophically correct, but it must be kept in mind that *theory* and *practice will not* and *cannot be made to coincide* under all circumstances. Theorists may philosophize and speculate in reference to a given principle, and it may *appear* entirely correct, but

a well-conducted experiment is always more reliable than all that may be penned on the subject. It is no uncommon thing to see almost every correct principle of draught set at naught in the manufacture of cutters and sleighs, as well as in wheel vehicles; and it is proposed to examine some of them, and point out what seem to be errors, and suggest a remedy.

We will commence with the *form of the bottoms of the shoes*, as this has far more influence on the running of a sleigh, or cutter, than we are willing to admit until we have some ocular proof against or in favor of a given theory. Why do sleigh-shoes wear out first, almost always, near the forward end? There are sometimes two reasons for it: and one is, they are too straight on the bottom; and another is, the point of draught is so high that, when the team moves forward, the draught tends to draw the forward end of the sleigh down, as with the rolling hitch already described, at figure 1. Another reason sometimes is, too much of the load is placed at the fore end of the sleigh, or cutter. Now, when sleigh-shoes are straight, or nearly so, on the bottom, when they come in contact with stones, gravel, and other hard substances, the friction is much more intense when they first meet each other than it would be were the bottoms of the shoes more rounding. So, when the tongue, or thills, are attached *too high*, there is a great downward draught at the forward end of the runners, which causes more intense friction near the fore end of the sleigh, and, as a consequence, the shoes wear out soonest where the friction is the greatest. It is not denied that sleigh-shoes *may* be *too* rounding on the bottoms, but there is little danger of it for *long* sleighs, unless the curvature should exceed two inches. When the sleighing is fine, and there are no bare places in the track, we may hitch to a sleigh almost "any how," and it will be very difficult to determine, either by riding in it, or by examining any part pertaining to the draught, whether every part of a sleigh is philosophically and practically correct. But, when the sleighing is poor, and bare ground and pavements appear here and there, let me be blindfolded, and give me the lines and a guide to keep the team in the track, and if I do not tell correctly whether the runners are too rounding, or too straight on the bottoms to ride easy, and to run with the least force of the team, or whether the traces are too much on a level, or too slanting, or as nearly correct as is practicable, I will acknowledge that I do not know as much as I might. When the under side of long sleigh-shoes are made nearly straight,—which is a very common form,—with a very short or abrupt crook of the runners, when either of them strikes a stone, or corner of the bare pavement, or the bare ground which is elevated a little above the level, the concussion is so intense that, unless one who may be riding in it is *back* of the middle of the sleigh, he will experience a jar, which will remind him of an electrical shock; and more than this, the runners must rise so abruptly to pass over such obstructions, that the draught of the team is greatly increased, in the same manner that small wheels strike an obstruction with more force,—or "more dead,"—requiring more strength of a team to haul the sleigh over it. But, when the runners have a long crook, and the bottoms of the shoes are well curved, one will perceive as much difference in riding over obstructions in a sleigh as may be discovered when riding in a carriage of large, or one of small wheels.

We all know that, when a vehicle having small wheels moves over a rough and uneven track, it not only requires more team to draw it, but "it rides hard," as the saying is. This is precisely the case with cutters and sleighs. When the runners and bottoms of the shoes are nearly straight, it goes bumping and thumping along like a rail-road car off the track, running on the sleepers; but, when the curvature of the runners is just right, so that a man can rock a sleigh, or cutter, a little, when it is standing on a level surface, it will run easier for a team, will ride easier, and the shoes will wear more evenly, provided the team is hitched at the most proper point. The bottoms of the runners may be made philosophically and practically of the best form to run easy for a team, and to ride easy, but, if the team does not draw from the most proper point in the runners, a sleigh will run hard and ride hard.

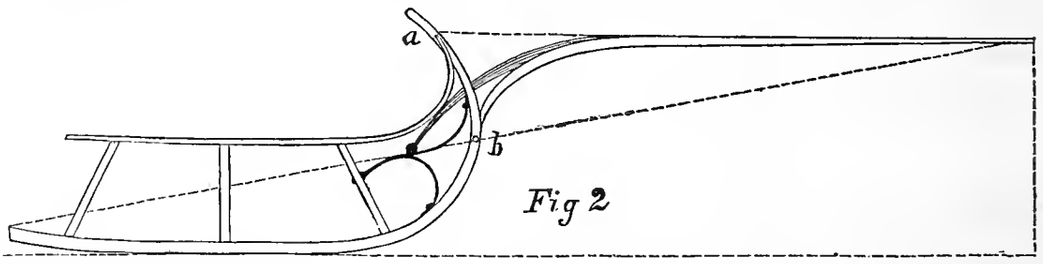


Fig 2

Figure 2 will illustrate, in a measure, the most proper curvature of the bottoms of sleigh runners. It will be seen that there is but a short distance on the bottom of the shoe that is straight, and even that portion which *appears* straight should be a little curved. Now, then, when a runner of this form comes in contact with any obstruction over which it must pass, the sleigh rises gradually and passes over it, just as a large wheel will pass over an obstruction, without jolting. Then, by having the hind end of the runners turn up, as in the fig., say an inch, or inch and a half,—according to the length of the runners,—the sleigh will rise more easily when going over an obstruction, will glide off it with less jolt, will have a much more agreeable motion for those riding in it, will start with less force of the team, may be turned around more easily, is guided by a team with the least possible force, and will be more in keeping with correct philosophical principles of draught.

In order to satisfy the incredulous that my position is a correct one,—although it may be "square in the face and eyes" of popular practice,—let them take two pieces of heavy plank, as long on the bottom as the runners of a sleigh, and make a plank sled; and let the bottoms of them be nearly straight, turning up abrubtly at the fore end. Now, let a man draw it when the sleighing is good, and when it is rough and poor; and then give the bottoms of the runners the form shown at fig. 2, and draw the sled over the same ground and obstructions the second time, and I feel satisfied that, if he be an observing mechanic, he will affirm that, as a general thing, the runners of cutters and sleighs are made too straight on the bottom.

Leaving the form of the runners, we will notice some of the

Rules for Attaching the Tongue to the Runners

of a sleigh at the most proper point.

Philosophers, engineers, and practical carriage and sleigh-makers, who have investigated this subject, have come to the conclusion that the most proper inclination for the draught traces is of "such a slope that if the same slope were given to the road, the wagon would just descend by its own weight." (See Thomas' Farm Implements.) In some sleighs or cutters this would be practicable, to have the tongue or traces of such a slope, while with others it would *not* be so. *Convenience*, in many instances, must decide the most proper point where to attach the tongue to the runners.

Some sleigh-makers adopt this rule:

(1.) Strike a line on the runners even with the upper side of the benches of the sleigh, and attach the roller or draught irons at that point.

(2.) Others say, attach the tongue to the runners at a point in them which shall be on a line with the under side of the beams.

(3.) Others, again, say, strike a line from the hind end of the runners to a point near the end of the tongue, or thills, which shall correspond with the height of the shoulders of the team; and, at the point where the line crosses the runners, attach the tongue, as shown in fig. 2; and then have the tongue bent just enough, as in the fig., to bring the traces of the harness in a horizontal position.

(4.) Others say, extend a line from the hind end of the runners to a point corresponding with the end of the tongue, or thills, where the horses are attached; and at the point where the line crosses the "stays," or "brace irons," which pass from the forward knees to the runners, attach the tongue; and then let the tongue, or thills, be bent enough to bring the traces in a horizontal position, as shown in fig. 2. See the manner of ironing sleighs in volume first of this Magazine, plate XXI.

The first rule, and the second, also, *may* be exactly right, providing the knees were of exactly the most proper length. But, supposing the knees are eight inches long, between joints, in one sleigh, and sixteen inches long in another,—the runners of each sleigh being of equal length. If the point of draught be correct in *one* instance it must be incorrect in the other.

There are great errors in the third and fourth rules; and the most conspicuous one is, "bending the tongue, or thills, upward, so as to bring the traces in a horizontal position." If the draught were at the *end of the tongue*, or thills, there would be an advantage in bending them upwards. But, as the force which moves a sleigh is applied,—not at the end of the tongue, but at the termination of the straight part of it,—the downward draught, or rolling hitch,—see fig. 1,—is almost as great as if the tongue were straight, and it were attached near the tops of the runners, as shown by the dotted lines, fig. 2. There is a great amount of the available force of a team lost by having the tongue, or thills, bent upwards, when they are attached at the proper point in the runners; and, in order to satisfy the incredulous that this is true, let them drive over a rough and uneven track with a sleigh bearing a load with a bent tongue, and with the traces nearly in a horizontal position; and then pass a chain around each runner, at *b*, fig. 2, and let the whiffletrees be hitched to this chain, instead of the bent tongue, and it will be seen, on driving over the same obstructions with the same load, that the sleigh will glide over with comparative ease; whereas, when the draught is *above* the bent tongue, a sleigh will strike an obstruction so dead as to almost stop a team.

Bent tongues and thills *appear* more fanciful than straight ones, but when lightness of draught is any object, some arrangement should be adopted for attaching the whiffletrees *below* the tongue, so that the traces may have an upward slope, parallel with the dotted line (fig. 2), from *b* to the end of the tongue.

When tongues are attached to the runners of lumber sleighs at a point a little below the point indicated by either of the foregoing rules, and a good teamster gets in a spot with a heavy load, where he desires to use all the force of his team to the best advantage, he will put the whiffletrees *on the under side of the tongue*, or attach them with a chain to the runners, and bring the point of draught as low as possible. There is little danger of getting the line of draught too low, unless we can be assured that a sleigh will encounter no bare ground, nor other obstructions; and, when the sleighing is good, and there are no obstructions to pass over, it will require a very nicely conducted experiment to indicate any difference in the draught, whether the team is hitched a foot, or but half a foot, above the bottom of the runners. What has been penned has particular reference to *long* sleighs; although much of it is equally applicable to "bobs," or

TRAVERSE SLEIGHS.

The attention of those who are accustomed to use sleighs of almost any kind is now being directed to this kind of sliding vehicles to an unusual extent, and they are anxiously asking: "What are the principal advantages of traverse sleighs, when compared with *long* sleighs?" Some of the advantages are: for general purposes they are *more convenient;* a team will haul a load on them with less fatigue than they will on a long sleigh; they are not as liable to up-set; and they are much easier to ride on, whether they are designed for pleasure, or for hauling loads of various kinds.

Some of the points of *convenience* which they possess over long sleighs are the following: *they can be adjusted to receive a long load of any kind, so that it will rest equally on each sleigh;* whereas, a *long* load will rest too much on the hind end of a long sleigh; *a team will turn them around in the deep snow, or in a bad place*, where it would be almost impossible to turn a loaded long sleigh; *and, for hauling logs, or long timber, one sleigh only may be used when it is necessary;* and when we come to house them for summer they can be taken apart and handled with more ease, and be placed where they will occupy less room, than a long sleigh.

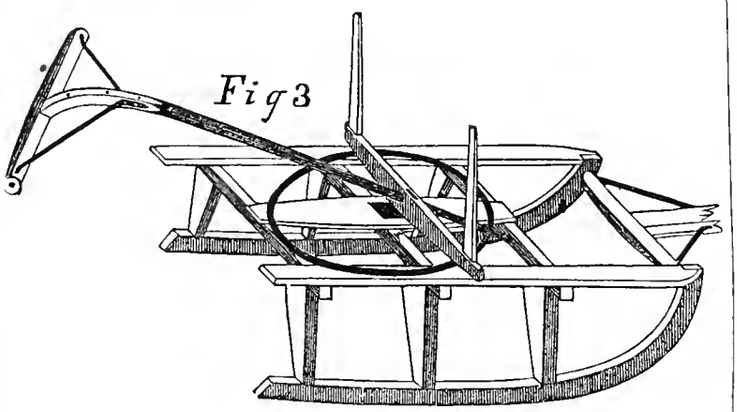
With reference to the *draught* of traverse sleighs. When the track is smooth there is no perceptible difference between traverse sleighs and a long one. But, when a *long* sleigh encounters obstructions, more force of a team is required to draw one runner over them than is necessary with traverse sleighs, because, when a runner of a traverse sleigh must rise over an obstruction, only about one-fourth of the load rests upon it; whereas, with a *long* sleigh *half* the load must rise at once, which will require much more force to raise it to its greatest height than is required, if one-half the load can pass over and be on a smooth track before the hindmost runner strikes an obstruction. When a long sleigh goes into a "pitch hole" it gives the team a very disagreeable thrust, and

then a great exertion is required to bring it out. But the forward sleigh, when going into a hollow, is *retarded* by the hindmost one, and then, as the hind sleigh begins to descend into a hollow, it tends to thrust the forward one up out of the hollow, thus lessening the draught of the team. When *one* sleigh is in a "pitch hole" the other is on level ground. This makes it much easier for a team than if the whole load must be hauled from the hollow at once, as when on a long sleigh.

Now, if a long sleigh will just turn over with its load, by one runner passing over an obstruction ten inches high, a load on traverse sleighs will pass over the same obstruction in safety, because, while one sleigh is passing over, the other is standing on a level; and, when one stands on a level track, one side of the other sleigh must be elevated higher than we would naturally suppose, before they will turn over.

In attaching the hind sleigh to the forward one, if any reference is had to ease of draught, it is highly important that the workman should have a good understanding of the most correct principles of draught. When the reach, or perch is attached to the hind sleigh runners, as high as the benches, and extends horizontally to the beam of the forward sleigh, the hindmost sleigh will draw hard over obstructions; but, when attached as low down as may be practicable, and the forward end of the reach as high on the forward sleigh as is convenient, the draught of the hind sleigh is rendered much lighter when on bare ground, or passing over obstructions.

There are several methods of attaching the hind sleigh to the forward one, in order to be most convenient and easy of draught. In some instances no perch, or reach, is used to connect the two sleighs; but the hind sleigh is drawn by the *body*, and short stay chains are attached to the forward end of each hind runner, and to the sills of the body. This arrangement subserves all the purposes of a perch. But, when there is no body, nor box, on a sleigh, it is necessary to use a perch, or reach; and here



the principle of bending tongues, or thills,—to which allusion has already been made,—is of great practical utility, because, the draught is from *the end* of the perch, —and not as with a bent tongue,—near the *bent end*. By having the reach bent upward, the hind sleigh will rise over obstructions more easily than if it were straight.

Figure 3 shows a very good manner of ironing traverse sleighs, and which is preferable to any other that has come under my observation. The perch is made of a bar of iron three inches wide, with several holes near the fore end, for receiving the king-bolt, and passes *through*, or *beneath* the bolster; and the hind end is locked to a short piece of bent perch. The bed-piece should be not less than four inches thick for a heavy sleigh, and the king-bolt should not pass through the middle beam, as that would weaken it unnecessarily. The "*sway circle*" should be made of not less than three-quarter iron, unless for a light sleigh. This arrangement will allow the forward sleigh to turn almost at a right angle to the hind one; and in backing, even when one sleigh stands at nearly a right angle to the other, the sway circle will prevent the hind end of the forward sleigh rising up, and "unshipping" the box, as is frequently the case when the hind sleigh is simply attached to the forward one with a clevis, or its equivalent, and with a straight reach, or perch, which will not allow the forward sleigh to turn at a right angle to the hindmost sleigh.

There is another thing of no little importance when ease of draught is any object, which is, placing the bolsters in the most proper place. When the runners extend to an undue length *back* of the hindmost benches, the bolsters should be placed several inches back of the middle beam, in order to balance well on the shoes. Sleigh-makers are quite too apt to place the bolsters too far forward on both sleighs, which increases the draught more than we are aware of, especially in the hindmost sleigh.

Lake Ridge, Tompkins Co., N. Y.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

VIII.

A week passed away, and the Professor, after trying to get a situation at book-keeping, clerking, teaching, and working on a farm, without success, determined to proceed down the river. Taking all our funds he bid me good-by with a trembling voice and started off for the landing. Poor fellow! I can see him now as he appeared then, with his carpet-sack suspended on a stick over his shoulder, his pants tucked inside his boots, and his head bent forward, apparently in no pleasant mood. Turning the next corner, he disappeared from view, and with a heavy heart I resumed my labor. The last link that bound me to society was thus torn away, and for several days I was absolutely miserable; but then, finding an agreeable companion in the person of a fellow-boarder, I managed to pass the remaining three weeks of my stay rather pleasantly. During the day I kept very busy at work, and when evening came I would sit down and enjoy the comforts of my pipe, or take a stroll upon the bluffs that surrounded the town like great bulwarks reared by nature for its protection. Parties of Indians would often come in town and camp on the hills near by, where I would visit them and study the savage character by long, and sometimes interesting, conversations. Finishing the house on which I was at work, I determined to follow the Professor down the river and obtain a situation at my trade, if possible. After leaving orders to forward all letters to St. Joseph, I accepted the invitation of a gentleman going part the distance, to ride with him. Together we proceeded as far as Rockford, when, shouldering my bundle, I started off

afoot. Leaving the farm-house where I obtained dinner the first day, I had a houseless prairie of twenty miles to cross. The June sun, from an unclouded sky, shone with scorching power, while no cooling breeze was stirring to fan my aching brow. After proceeding six or seven miles a dark mass of clouds arose in the west, threatening a terrific thunder storm. At the same time I was suffering severely from thirst. Stopping at a slough, I drank a mouthful of water; but it was warm and bitter, so that it sickened me, and added to, instead of relieved, my thirst. The storm-cloud rose swiftly, growing blacker as it neared the zenith, while the lurid lightning flashed up from the horizon, and, like rockets, darted off in a hundred streams of fire. The silence that reigned about me was oppressive. I stopped and listened, hoping to hear some sound,—even the chirping of a bird would have been relief; but the meadow-larks had all vanished, and I heard nothing but the wild throbbings of my own heart as its pulse-beats echoed through my brain.

There is something indescribably awful in this dreadful silence of nature, that has to be experienced in order to understand it. It presses on the senses until we feel miserable, and long for some sound to break the spell; and it came to me—one low sound—a dull whir in the grass but just before me. On looking in the direction indicated, I saw a prairie rattlesnake, giving his famous warning of danger; and, although anything but pleasant under ordinary circumstances, it really sounded grateful to my ears; but even it, as though oppressed with the silence and fearful of disturbing the awful solemnity of nature, ceased its rattle, and darted off in the grass. Still nearer came the clouds, bending over me, as though they sought to embrace the broad prairies; and soon the low, muttering thunder was heard in the distance, bringing the greatest relief to my mind. Still louder it became as it approached near, and soon I could see, afar off, the grass and tall flowers bend before the coming blast; and I could hear the roaring of the winds as they howled over the ridges and shrieked through the deep ravines. In a few moments the storm was upon me. The winds rushed by like "fiends incarnate;" the great drops of rain fell slowly at first, then fast and thick, while the thunder roared continually in terrific peals, bursting directly above me; and the lightnings, now red and glaring, flashed with blinding brightness on every side, darting along the ridges, and fairly encircling me in fiery billows. It was a dreadful storm,—such an one as is only seen on the houseless prairie. Never before had I experienced the force of the biblical metaphor, "and the windows of the heavens were opened." In a few moments I was completely drenched. Pulling my hat down over my eyes, so as to lessen the blinding effect of the lightning, and buttoning my coat tightly around me, I pressed on over the road, now rendered slippery by mud, while a stream on either hand, coursing down old wagon-tracks, roared like mad mountain torrents. Never had I seen the elements engaged in so wild and sublime a strife. All alone as I was, my imagination naturally busied itself in presenting strange ideas born of the scene. The space above seemed the battle-ground of two conflicting armies,—spirits from other worlds met in deadly combat; the thunder was the report of their artillery, the lightning the flashes of each discharged piece, and the clouds was the smoke that hovered over the scene, vailing it from mortal eyes. You remember, when we were children, superstitious and ignorant nurses told us that the thunder was the voice of God in His anger; and we believed it then. We would fain believe it now; but reason and knowledge have stamped it as false. Yet, I imagined, as a terrific peal, clearer and sharper than the rest, broke forth, that it was the voice of some valiant captain rising far above the cannon's roar, urging his regiment on to perform more desperate deeds of valor.

After an hour's duration the storm passed away, leaving behind a broken mass of clouds, presenting confused fragments of every conceivable shape. There was a great ledge of rocks, piled up in a stupendous mass; near by a castle, with dome and turret and pillars, stood forth in bold relief;—there were heads of giants, and wild beasts, and fish, and birds, with every feature plainly visible. Soon some driving blast would change the castle to a ship, with all her sails set and pennons flying; and, as the sunlight peered through, the ledge of rocks was broken up and converted into gorgeous robes, edged with golden fringe.

Ere long the sun shone forth with matchless splendor, turning the rain-drops on the grass to diamonds; and the atmosphere, purified and cool, was fragrant with the perfume of many flowers. I had managed to drink a few drops of rain, which allayed my thirst somewhat for a time; but it soon returned, and I suffered as though with a burning fever. Water! water!—it was all around and about me, but none could I drink; every drop was thick with mud. Woodworth's "Old Oaken Bucket" appeared to my mind, as it rose from the pebbly bottom of the old well, and I smacked my lips together at the delightful vision; but they were dry, parched, and feverish. Pure, cold water, like the rest of God's blessings which he has bestowed on us with a bounteous hand, we do not appreciate until it is withheld from our grasp.

My only hope was in reaching the timber, where I was informed I would find a farm-house, and that appeared off five miles, or more. With the desperation that suffering inspires, I walked more rapidly. An hour passed by,—I could see the trees plainly. Another hour, and a pleasant dwelling appeared off the road a short distance. Dragging my wearied limbs, rather than walking, I reached the open door. A young lady was busily engaged in some household duties within, and, as she looked towards me, I repeated the only word that had been on my mind for the past hour—"water!" and sank down on the door-step. She seemed to divine my situation at a glance, for she left her work and hurriedly brought me a large tumbler, filled with the delightful beverage. I drained it at a draught; then a second, and a third. The tears came to my eyes as I thanked her, and then I told her of my sufferings, in a broken way, for I was very much exhausted.

After a refreshing night's rest, I started early on my journey, and, in due season, reached St. Joseph. I found it to be a thriving town, and populated by an energetic class of people. On making inquiries at the Post-office, I received a package of letters, forwarded from Council Bluffs, among which was one from the Professor, wherein I learned that he was out at Grindstone P. O., De Kalb County, teaching. As no carriage-work was done in St. Joseph, I concluded to visit the Professor, and then proceed farther down the river in search of employment. Inquiring for Grindstone P. O., I learned it was thirty-five miles north-east; and, as a stage ran within ten miles of the place, I immediately engaged passage. Being "sot

down," as a hoosier would have it, at a "thriving western town," containing some dozen dwellings, and, perhaps, seventy-five inhabitants, I was directed to my destination by the landlord of the "Planter's Home," and half a dozen loungers in the bar-room united, all telling me of a certain turn in the road which *might* lead me astray.

Thanking them, I started off. The day was pleasant, with a cool, west wind, and, as I was disincumbered with baggage, I walked along rapidly. Just at dusk I reached the heavy timber that skirted Grindstone Creek, and, thinking I must be in the neighborhood of the Post-office, I halted at a rough cabin, and made the necessary inquiries.

"Just a mile-and-a-af, stranger," answered the woman. "Goin' to live thar?"

"No, madam. I am merely seeking a friend," I answered.

"Friend?—who mought he be?"

"A young man who is teaching school in this locality."

"What, a feller with whiskers on his upper lip?"

"The same, madam. Do you know him?"

"Well, I've seen him. He lives at Col. Danvers', just two miles, stranger, off in this direction. Just take this ere road—it's a tol'rable plain one—till you cross the creek, then turn to the left, and, if you wish to cut across lots, go right through the big field; but no, seein' you're a stranger in these parts, guess 'twould be best to keep the road. As I was sayin', turn to the left; road tol'able straight till you pass the school-'ouse, then you'll see a lane to the right; foller that half a mile, and you'll get to Col. Danvers'—a big house, painted white, with"——

"Thank you! Good evening, madam;" and, by the time the above fragment of a sentence was finished, I was out of reach, and, pushing ahead as fast as possible, I soon arrived at the creek. Crossing over, I followed the good woman's directions, and about nine o'clock I reached the "big house" of Col. Danvers,—said "big house" containing two rooms on the first floor and a low attic above. All was dark and still about the dwelling. On opening the gate a great dog broke out with a sharp growl; but having reduced dog-taming to a regular *Rareyfied* system when a boy, with a boyish propensity to appropriate apples and melons from our neighbors' orchards and gardens at the hour "when all honest folks should be abed," I silenced him by a word, then advanced to the door and knocked.

"Who's thar?" asked a gruff voice within.

"A traveler, sir," I answered. "I wish to stay all night." In a moment the door opened. "Pardon me for disturbing you at this late hour," I said, by way of apology, "but I am looking for a friend of mine who, I learn, boards here—your teacher."

"Just a day too late," exclaimed the invisible speaker. "He left here this morning for St. Ive. His month was up yesterday, and he concluded to leave. Come in, however, and stay over night. Sam, strike a light, and get some supper on the table for the gentleman. S'pose you've had no supper, sir? Hurry up, Sam! You'll find some milk in the crock, and bread in the cupboard. Lookin' for the teacher, hey?"

During the above remarks I had entered inside the door; but, as a chair admonished me not to proceed too far, I halted until a light was struck, which feat was performed just as the last question was asked.

"Yes, sir," I answered. "We parted at Council Bluffs a few weeks ago."

"Oh, yes! I've heern him speak of you lots o' times. He's a right jovial feller, aint he? We all liked him mighty well about here. He'd go fishin' in the creek nights with the boys, and learn 'em how to fish scientifically; and they catched lots of fish, I tell you. Somehow, he didn't seem contented, and he got right lonesome towards the last. 'Twould 'ave tickled him right smartly to 'ave seen you. He was a little home-sick, I guess, although we tried to make him feel as comfortable as possible, and the gals would talk to him; but he was kind o' curious about things. Set up, stranger, and help yourself. It'll be rather a poor supper, but it's late, you know."

After assuring the speaker that I would make an excellent supper, I attacked a bowl of bread and milk, he still talking away, in the strain above quoted, until I retired for the night.

The next morning I bid the family adieu, and returned to St. Joseph. Thus ended my search for the Professor. If these pages should ever be seen by stranger eyes, some one who has followed us thus far will, perhaps, feel sufficient interest in the history of my fellow-traveler to pause and ask, "What became of him?" We will answer the question by copying a letter received several months afterward, dated from his childhood home, in an Eastern State:—

Most Grave and Potent Senior:—Through a never-to-be-thought-of channel, I have but just heard where you are. While in the city yesterday, I accidentally run across a curious-looking genius, whose uncouth appearance and verdant looks reminded me of the backwoods. So I took a "second-sober" look at him, and—who do you think it was? As there is no probability of your guessing, I will tell you. It was our Prairieville friend, whom we called the Judge, as you may remember. He said he'd "just come on with a drove of beeves." So, after questioning and cross-questioning him for half an hour, I managed to learn that Miss Myrtle had received a letter from you; and, for a wonder, he remembered the name of your town,—so I lose no time in writing. You remember how we parted at Council Bluffs. Who thought then we would not meet again? Not I, surely; but here I am—there you are. Don't get impatient,—I heard you ask the question, "What have you been about all this time?" and I'll answer it with all possible dispatch. I wrote you a brief note when I engaged the school on Grindstone Creek; but, as I obtained that school in a scientific sort of a way, I will relate the circumstances connected therewith. Arriving in St. Joseph with seventy-five cents, and learning that teachers were in demand out in the rural districts, I invested ten cents in candy, so as to be ready for any emergency, then sallied forth, with knapsack on my shoulders, *a la* Bayard Taylor in Europe. Reaching Grindstone P. O., I learned they wanted a teacher in that district, whereupon I called on the President of the Board of Trustees. Found him to be a "fine Kentucky gentleman," rather portly figure, dark features, and small grey eyes, that were naturally about half closed. Making known my business, he opened his eyes a little wider than common, and took a survey of my person, for you must know that I looked like "the gentleman who had seen better days." I stood the test very well, although I doubt not but he thought I would be more at home in a corn-field than a school-house. As he appeared undecided in his own mind what to do, hinting about seeing the other trustees, I said, "Well, sir, I wish to come to some definite conclusion as soon as possible, for I am in a hurry, and, as Virgil hath it, *tempus fugit*."

This caused his eyes to open wider.

"I s'pose you've got pretty good larnin'?" and he took a second scrutinizing survey of my person.

"Have passed several pretty rigid examinations with success. *Docendo discimus*."

Eyes expanded still more.

"We've got some boys and gals here pretty well advanced, and we want a good teacher."

"Certainly, sir, and with pleasure I will lead them up the rugged steeps of science, and, if necessary, instruct them in the intricate mysteries of the dead languages. *Omnia vincit labor*."

if I am almost sad, when thinking how soon I am to leave the dear friends who have made my stay so pleasant? But the time has not quite yet come to say good-by, so said a friend last evening, as we spoke of the time when Lizzie and I would both be gone from Elm Farm.

But I took the pen to tell you of what has happened, not what is going to happen. The Pic-nic! O, yes! you must hear something of that!—I had almost forgotten. Jennie, dear, had you only been with us, how delightful it would have been. Allow me to say, country people know how to get up Pic-nics. Every one goes, every one takes something good to eat, and every one anticipates a nice time, therefore, few are disappointed. You may believe Lizzie and I were not idle the week previous to July fourth. We had the honor of being chosen receiving committee, our business being to call and consult with different neighbors, and in turn to pass our own opinions as to what would be most acceptable in the line of "good things to eat" on that occasion, and also to collect dollars, dimes, and cents, for the purchase of candies and nuts for the children. You may think this no very agreeable task. I thought so too, at first, but on the contrary found it quite pleasant,—all seemed so kind and polite, so ready to do what they could to make the children happy. The money we collected was delivered into the hands of the Treasurer, Mr. Walter Cameron. Uncle very kindly gave us the use of "the buggy," and Prince, Lizzie's favorite horse, which helped us along nicely, Lizzie being an excellent driver. O, by the way, I have been learning to ride on horseback of late. Prince is the only horse Uncle has which can be managed by ladies. Lizzie understands him well and has been giving me lessons. I commenced by riding down the lane,—Ben leading the horse, while Lizzie, Aggie, Allie, and Nero, the Newfoundland, acted as *footmen*. Had Prince felt so disposed he would have had the very best excuse for running, as I can assure you our laughter was not the faintest, and to help matters on, Nero barked at the top of his great voice. But Prince proved himself worthy the title; we reached home safely, and with high hopes of future success.

Next day we took advantage of the absence of Ben and the girls, and went out by ourselves. I donned Lizzie's riding hat and habit, and guided Prince myself,—Lizzie and Nero walking by my side. We proceeded down the green lane again, then out into the broad, flowery meadow. On the home route, Lizzie persuaded me to let Prince trot, and soon I found myself far in advance of her. Nero (who always attends us) seemed not to like this, first running one way, then the other, as though undecided as to which most required his services. I heard Lizzie's silvery laugh in the fair, still meadow, and in a moment more was met by Frank Ashley, who had called to take Lizzie and me to visit his mother and sisters, and, finding we were out practicing horsemanship, had started in search. Mr. Ashley praised my courage much, and, by the time all was explained, Lizzie joined us, and together we proceeded home. Then leaving Mr. Ashley to care for Prince, we hastened to prepare for the visit, which had long been anticipated with pleasure by me, at least.

No very long time was spent in dress; that is not needed here; neatness and taste are enough. Grandmother and Aunt wished us a pleasant time, and sent messages of love to Mrs. Ashley. And so we started for Orchard Hall, which, in a short time, is to be the home of Cousin Lizzie. I suppose you do not care particularly for Orchard Hall, therefore I omit the description, only this: it is a neat, retired spot, with tall, old trees, a well-kept garden, and has a show of gentility.

Mrs. Ashley met us in the hall. Picture to yourself a lady of some fifty-five years, with a quiet smile ever upon her countenance; gentle, easy ways, which make you feel at home; and, withal, now and then a kind of mirthfulness, which tells the heart has not yet forgotten its young years,—and you have before you "The Widow Ashley," as she is known throughout the neighborhood.

Nellie and Laurie Ashley are still, pretty girls, of sixteen and fourteen years. They seem very fond of Lizzie. Frank spent part of the afternoon with us, and just before tea Mr. Cameron happened in. He did not know we were there, of course,—how could he? Tea passed off pleasantly,—my adventure on horseback being referred to and finely described by Frank, assisted by Lizzie.

Mr. Cameron happened to be with his horse and carriage, (how fortunate!) so after tea we took advantage of the beautiful moonlight and went out for a ride. Mr. Ashley and Cousin Lizzie, Mr. Cameron and myself, *Kittie Leigh*. I wanted Lizzie to let me go with Frank, but she said, "No."

Jennie, I wish I could describe Walter Cameron to you. I like him better than I do Frank Ashley; why, I do not know. I wonder what Lizzie thinks of him; and I wonder, too, if he *likes* Lizzie? Sometimes I think he does; he comes to our house so often. I told her so once, after he left, but she only laughed, saying she would tell Frank, and he could tell Mr. Cameron what Kittie Leigh's opinion was. Walter Cameron is a native of Scotland, and has been four years traveling in North and South America. He has a splendid education, refined taste, and is, on the whole, just what I call a real gentleman. He has been now several months with his sister, Mrs. Mason. He says he hardly knows what has kept him so long at the little parsonage, but somehow time has passed so pleasantly he has not known just when to start. Very soon he is going home, and perhaps may never see America again,—so he said last evening. But what am I writing? I was to tell you of the Pic-nic.

Lizzie and I made moss baskets to ornament the tables, and trimmed evergreen trees with fruits, flowers, and mottoes. Lizzie trained some of the children to sing, and recite selections of poetry, which passed off admirably, reflecting much credit upon teacher as well as scholars. How happy all the children looked, as they met parents, teachers, and friends, seeming so kind. Lizzie had to see her class all provided for before she could be seated in Mr. Ashley's carriage; however, after a short delay, all were ready. How smilingly Mr. and Mrs. Mason bowed good morning, as they passed us! I wish you could know them,—they are so pleasant, so agreeable. We found everything in good order at the grove, and at once proceeded to the tables, where were baskets and baskets of everything good, waiting to be arranged. Already some of the committee were there, and soon, under Mrs. Mason's direction, we were well at work, so by the time the children were arranged, and some introductory remarks had been made, we were ready to join them. How pleasantly that day glided away! It will be long ere its memories pass from my

heart,—long ere I forget the kind friends and pleasant words, the sunshine and the flowers.

As the sun sank lower and lower, and the shadows grew longer and longer, we sought our homes, and none were heard to say, This day has been lost; we have not been happy. In my next I shall have Cousin Lizzie's wedding to describe. Mr. Cameron is to stand with Frank; I with Lizzie. Then both are to leave; he for his highland home over the blue ocean, I for mine in the crowded city. But, hark! Lizzie is calling. Some one waits for me in the parlor. Adieu, dear Jennie! Still I remain your Kittie Leigh.

Pen Illustrations of the Drafts.

MESSRS. J. A. & H. F. LOGAN'S HEARSE.

Illustrated on Plate XXXIII.

This sketch of a hearse is from the Messrs. J. A. & H. F. Logan, of Paris, Kentucky. The body proper is worked out from the solid plank, and the side paneled around the windows with white-wood deal; the windows in the side, four in number, are fluted around the edges, and around these again is placed an oval half-round moulding. Each corner of the body is ornamented with a broad and rounding piece of silver moulding, which our artist has undertaken to show in the engraving by tinting. The whole is finished with an imposing cornice, and surmounted with plumes,—the whole making a very pretty hearse.

For the New York Coach-maker's Magazine.

COUPÈ ROCKAWAY.

Illustrated on Plate XXXIV.

Mr. Editor:—Any new feature in the form of a carriage-body now-a-days is eagerly sought after, and prized when found; and there are a great many minds constantly employed in studying out designs, that seldom succeed in producing a new idea. Original designs are very scarce, and we may be thankful for those we do get through the success of the Magazine,—for I believe that as soon as anything possessing merit is produced, you are on the alert to give it to the world, regardless of expense; for which you ought to be encouraged. But this preamble may be thought rather out of place on this page, so I will conclude with a brief explanation.

The new feature in this body is the reversed scroll in the hind-quarter, and the close back-quarters. This back-quarter paneling may be so made as to be removed, and, by so doing, leave the quarter open, showing a sun-curtain. Hanging-up Rockaways on platform springs is comparatively new, but, being more expensive, the plan is not often adopted. In this example, either an iron loop or a brake can be used (it must run out from the rockers), with a neat light back-bar. X. Z.

For the New York Coach-maker's Magazine.

HERMAPHRODITE BUGGY.

Illustrated on Plate XXXV.

Mr. Editor:—Enclosed you will find a new design for a buggy, being partially a square wagon, and partially an arched buggy, with an entirely original design for the seat-rail, forming a very pretty draft for a cut-under vehicle. This buggy could very easily be made two-seated, by arranging a turn-over seat at the back, in the usual way; and when such seat is not required, it being hidden in the back compartment of the body, would still appear only as a light one-seated vehicle. Hoping that this sketch will be acceptable, I am yours, respectfully,

A Carriage-Maker.

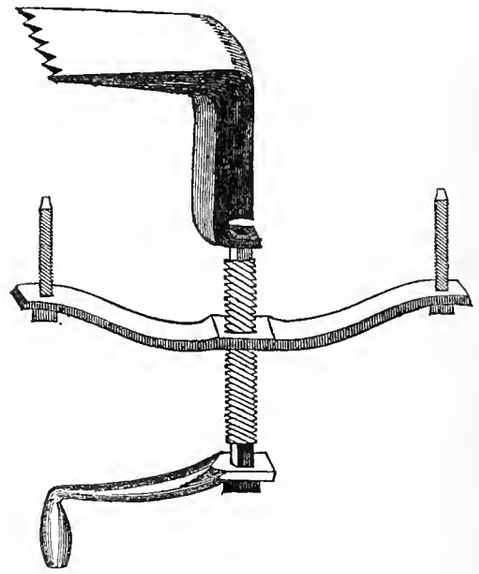
Sparks from the Anvil.

For the New York Coach-maker's Magazine.

IMPROVED BENCH-HOOK.

Bloomsburg, Pa., January 1st, 1861.

Mr. E. M. Stratton.—*Dear Sir:* I have an invention which may be worthy of notice. If it is of any use to you it is at your service. This is considered an improvement on the common bench-hook, and is regulated up and down by a screw, instead of driving with a hammer, as in the old way. This contrivance saves the trouble of hunting for a hammer every time the workman wishes to regulate his bench-hook.



I will give you a drawing of this hook, as near as possible. Persons employed in the shops where I am at work are using them, and find them to work well, as they hold better than the old-fashioned hook. You will hear again from me soon. From your friend,

A. S. Crossley.

[From the drawing it will be seen that the screw *hooks* into the bottom of the bench-hook. This is done by shouldering down the end of the screw to ⅜ of an inch, passing it through a hole in the collar formed at the lower end of the hook, and there securing both together, by means of a washer riveted to the end of the screw. The screw is operated through a nut-brace, fastened by wood-screws to the under-side of the work-bench, out of the way of the workman. By turning the crank, the bench-hook is raised or lowered at pleasure.—Ed.]

CASE-HARDENING IRON.

Prussiate of potash is sometimes used in case-hardening axles and other bearings of iron; but this process is quite superficial, and does not exceed the sixteenth of an inch; if made to extend to one quarter or three-eighths of an inch in depth, to say the least, it would be generally useless, as the object is to obtain durability of surface, with strength of interior, and this would disproportionately encroach on the strong iron within. The steel obtained in this adventitious manner is not equal in strength to that converted and hammered in the usual way, and if sent in so deeply, the provision for wear would far exceed that which is required.

Let us compare the case-hardening process with the usual conversion of steel. The latter requires a period of about seven days, and a very pure carbon, namely, wood charcoal, of which a minute portion only is absorbed; and it being a simple body, when the access of air is prevented by the proper security of the troughs, the bulk of the charcoal remains unconsumed, and is reserved for future use, as it has undergone no change. The hasty and partial process of cementation is produced in a period commonly less than as many hours with the animal charcoal, or than as many minutes with the prussiate of potash; but all these are compound bodies (which contain cyanogen, a body consisting of carbon and nitrogen), and are never used a second time, but, on the contrary, the process is often repeated with another dose. It would be, therefore, an interesting inquiry for the chemist, as to whether the cyanogen is absorbed after the same manner as carbon in ordinary steel, or whether the nitrogen assists in any way in hastening the admission of the carbon, by some as yet untraced affinity or decomposition. It may happen that the carbon is not essential, as the Indian steel or wootz is stated to contain alumine, silex, and manganese.

TEMPERING STEEL.

Giving the proper degree of hardness to tools is a subject of deep interest to most of our readers, so that any light that may be imparted on the subject must be of more or less importance. In the following table, originally prepared in England by Mr. Stoddart, something may be learned. In the first place, the steel should be hardened in the usual way, by heating it to a cherry red and plunging it into cold water. Afterwards the temper should be drawn by moderately heating the steel again. Different degrees of hardness are required for different purposes, and the degree of heat for each of these, with the corresponding color, will be found in the annexed table:—

Very pale straw color, 430°,—the temper required for lances.
A shade of darker yellow, 450°,—for razors and surgical instruments.
Darker straw yellow, 470°,—for penknives.
Still darker yellow, 490°,—chisels for cutting iron.
A brown yellow, 500°,—axes and plane-irons.
Yellow, slightly tinged with purple, 520°,—table knives and watch springs.

HOW TO TAKE THE RUST FROM STEEL.

Cover the rusty portion with common olive oil, and rub it in well. After it has stood two or three days, then rub the parts with finely pulverized unslacked lime until the rust is all removed.

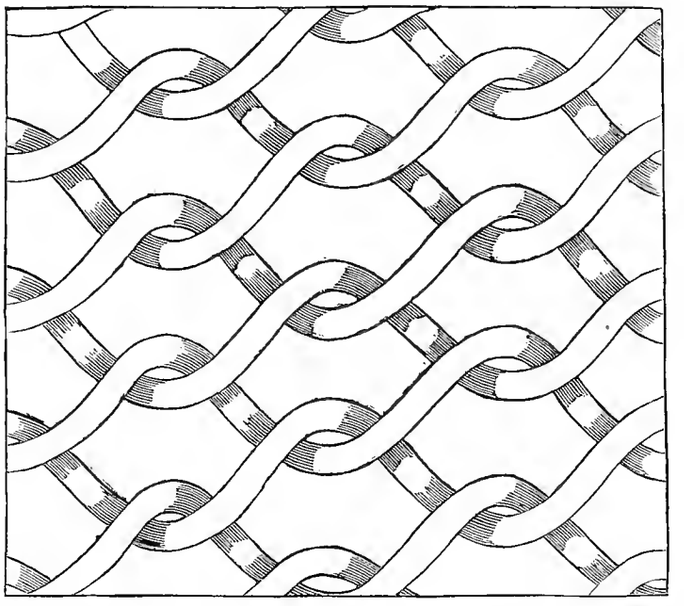
Paint Room.

Translated from the *Mercure Universel* for the New York Coach-maker's Magazine.

SPECIMENS OF PAINTING.

Figure 1.—Imitation of Cane-work.

Some Victorias are now made with a lacing or netting of cane, and in that style; but they are also made in paint, to imitate them, and this is the reason why we present this specimen. After the panel is finished, the



laced or woven cane is marked upon it with white chalk, and is afterwards filled up with a tint prepared of pure blue cobalt, moistened and ground with essence (spirit of turpentine?). The ground on which it is applied is, generally speaking, ultramarine blue, much deeper than the cobalt, and is afterwards shaded with smalt mixed with ultramarine, which darkens and gives it the necessary body, without making it too thick. When the work is done, and well dried, the whole of the panel is repolished, and the last coat of varnish is given.

Spread Network, or Matting.

This is most frequently made with osier of willow; but when done with paint, the drawing is done in the same manner as in Fig. 1; and the tint is made the color of osier, with chrome yellow mixed with white lead and drying varnish. It must be shaded with Indian yellow, mixed with white zinc; and the other shade is composed of gold yellow and calcined sienite earth and drying varnish. It is shaded with the same color, deep Indian yellow, with an admixture of burned sienite earth. When the squares are made, the same is done as directed in Fig. 1.—that is to say, it is polished,—and then give it the last coat of varnish.

[An engraving accompanied this text in the *Mercure*, but it is so nearly alike the one above, that we think proper to omit it.]

Figure 2.—Imitation of Cane, on a Black Ground.

As it has already been stated, in the course of this treatise, the cane is to be traced or drawn of the size required,

and filled up with a fillet-brush. The material employed for the purpose is composed of ceruse, or white lead, ground with spirits of turpentine, and mixed with drying varnish. Add thereto a little chrome yellow, also ground with spirits of turpentine, thickened or thinned as the brush may require; it is made thinner with spirits of turpentine, and thicker with white lead and yellow chrome.

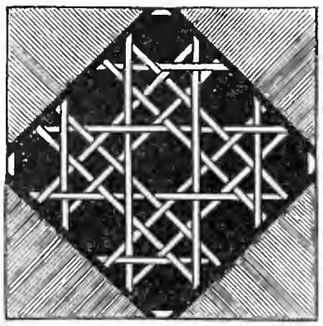
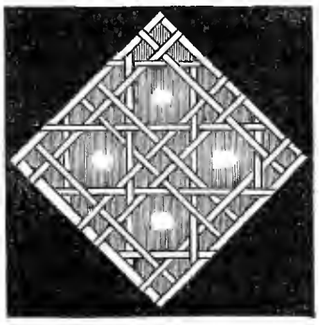


Figure 3.—Raised Imitation of Cane.

It must be admitted that the means of imitating, in coach-painting, the cane-work which is laid upon the panels by the caners, has not yet been discovered. In London they have succeeded in painting imitations tolerably well, but still very imperfectly, inasmuch as they do not appear to be interlaced, like the models they desire to imitate. Perhaps they may succeed one of these days; but, in the meantime, many attempts are being made, and even patent rights are taken out; and, now that we speak of it, we will say that we have seen a patent taken out by Mr. Bellevallette, for an imitation of cane. This process, or system, consists in stamping dressed sheep-skins in relief, and thus giving it the form of cane, and then spreading this tanned skin upon the panels. At the first sight it appears like the painted imitation of cane. Although we do not intend to criticise manufacturers, whose talents and merits we have always appreciated, we are, nevertheless, obliged to say—what competent judges have also remarked—that the object or end sought has not been attained. This style is too confused; the lines are not clear, which fact gives it a bad effect. And, however imperfect the painted imitations are, they are still preferable for the moment, as it is only this summer that carriages of this style have been produced,—a style which, we think, may take for a time, but will never create a sensation (*fureur*). We, nevertheless, will indicate the manner of doing the work. After having traced the cane, as done in the other styles, a matter more compact is made with the same ingredients, with the exception of the yellow chrome, which is substituted by yellow ochre, and varnish, a little less drying. It is customary to make the double squares first, and the single ones last. At M. Hilbert's we saw some in which the double squares were done last; and it has appeared to us better, inasmuch as the greasy and compact matter, which is allowed to escape from a tube along a guide-rule, interlaces much better than the single square.



CLEANING PAINT PREVIOUS TO VARNISHING.

Provide a plate, with some of the best whiting to be found in the market, and have ready some clean warm water and a piece of flannel, which dip into the water and squeeze nearly dry, then take as much whiting as will adhere.

IMPROVED LINSEED OIL FOR PAINTING.

An improved mode of treating linseed oil for paints has recently been invented in England by F. Walton. It consists in mixing linseed oil with about five per cent. of the acetate of lead, then forcing the oil by a pump into showers, where it meets with a current of hot air of about 300 degrees Fah. Oil for painting is rendered quick-drying by this process in a far superior manner to the old method of preparing common boiled oil.

Wax and Rosin for Painting.—To oil coats there is this objection, that they require a comparatively long time to dry. When oil of turpentine is used, though it evaporates fast enough, it leaves the painting soft; and although, by the addition of some other substances, the drying may be hastened, it even then takes up too much time, and leads to the substitution of whitewash and other water colors. Mr. Alluys now proposes a mixture which yields a coat of paint that will dry as fast as whitewash, but leave as durable and elastic a coat as that of oil. To prepare it, instead of more linseed oil, as usually, he adds to the paint, ground in oil, a solution of wax and rosin in spirits of turpentine. The mixture thus prepared has the appearance of common oil paint, and acts like such. On the evaporation of turpentine, it leaves a coat sufficiently hard to bear gentle rubbing without coming off. Barreswil has reported some experiments with this mixture, and finds that, although it becomes sufficiently dry and hard after a time, it does not equal a good oil coating in this respect; but he has no doubt that, for some purposes, it will be found quite desirable. He gives the following formula for its preparation: 10 parts of pure yellow wax are dissolved in the same quantity of linseed oil, and 5 parts of rosin in 8 of spirits of turpentine, at a slow heat (in separate vessels) until quite liquid; when they are taken from the fire and mixed, with constant stirring, until they thicken. In this condition the mixture serves for out-door and store-work. If to be applied with ground paints, it is thinned with spirits of turpentine, as required. —*Polytechnic Journal.*

Trimming Room.

SOMETHING ABOUT LEATHER.

In this age of general improvement in almost every department of science, we are satisfied that a few remarks concerning the manufacture of one of the most important materials employed in trimming carriages will not be unacceptable to our readers. It is not our design to recommend the "artificial leather" of the "Patent Plastique Leather Company," whose object is to manufacture *leather* from parings, shavings, and leather-cuttings, by a process partly chemical and partly mechanical, which is said by the English inventors to be better and cheaper than that taken entire from the animal's back, because we have no faith in such pretensions. We have great faith in the assertion that "there is nothing like leather," but, for the present, we shall confine this idea to the "old-fashioned" material. We would even go as far back as the time

when whale-oil tanned leather was exclusively used in leather tops to carriages. But to our subject.

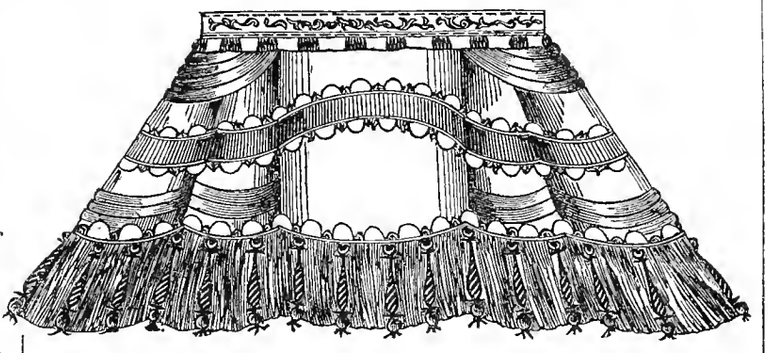
There are various modes of dressing leather, and these different modes are supposed to impart to it some peculiar quality which makes it suitable for a particular purpose. For instance, if we want a fine-scented Russian leather, which is tanned with the cheapest bark of Russia, we must, in finishing, soften it with an oil extracted from the bark of the birch tree. The combination of the bark and oil produces the highly softened and scented Russian leather. The peculiar softness in French curried leather is, in a great measure, due to the properties imparted to the hide from the use of the evergreen oak, with which the better descriptions are tanned. The English sole-leather, which is probably unsurpassed by any of its class, is, to some extent, dependent upon the superior qualities of the oak bark employed in tanning it. The bark of the oak tends to give a solidity and firmness to the leather, while other sorts are remarkable for the softness they impart. Each material used in tanning gives some distinct quality in respect to color and toughness, or capability of resisting moisture and decay. Experience goes to prove that the tanning principle, in different combinations, is found in the bark and leaves of different trees; and though chemistry has done something in the way of improving, still it has not accomplished all that might have been reasonably expected.

Something, however, has been effected by mechanical means, in the introduction of steam machinery in the dressing, by more finely grinding the bark, and in washing, glazing, and finishing the leather. Very important results have been produced from the invention of machinery for splitting hides; but whether this has been advantageous to the interests of consumers is very questionable.

Since the introduction of patent leather (among which we class the enameled), a great improvement has been made in the elegancy of pleasure carriages; but this beauty to the eye has only been gained by a great sacrifice of utility. The elastic japan, that gives to leather its fine gloss, adds greatly to its destructiveness in our cold climate; and the more elastic mode of japanning, that produces enameled leather, which in milder weather permits of its being folded, is not entirely free from the same objection. The old-fashioned morocco leather formerly in use was not subject to these objections, being obtained from the hides of sheep and goats, and tanned very slightly in an infusion of the bark of the sumach tree; after which they pass through many processes previous to that of being dyed. This leather was originally manufactured by the Moors,—hence the name, morocco. This kind of leather, although but little used in this country at present, is still used in Europe for the inside linings for carriages, very extensively. Horse-hides, formerly tanned and finished in whale-oil for carriage aprons, have been superseded by cloth imitations of enameled leather, nearly as protective against the weather, and not so liable to become dry and mouldy. This is now the favorite material for buggy foot-aprons among all classes of American carriage-makers, and is much the cheapest in price.

DESIGN FOR A HAMMER-CLOTH SEAT.

We offer this design to our readers, claiming for it an original feature, by adding the broad ribbon-like cloth band seen across the central part of the engraving. This



is bordered with a heavy seam, and edged with gimp. The ribbed extra pieces, above the tassels and fringe, may be cut out of pasteboard and covered with the same cloth as the body of the seat, say a bluish brown.

EXPLANATION OF STITCHING-PLATE L.

Nos. 1 and 2 are designs in half figures for buggy-boots, contributed by our friend, Mr. O. C. Hutchinson, of Bellefontaine, O.

No. 3 is a design suitable for dash-corners, the corners of boots, &c., in half figure.

No. 4, also in half figure, will be found very appropriate for the fronts of cushions, or the central ornament of dash-flaps.

A Law for Common Carriers.—1635. In the preceding reign, and this, several proclamations "for the restraint of excessive carriages, to the destruction of the highways. Yet this great abuse increased, to the public nuisance, and likely to hinder the general commerce of people, and become unrepairable without excessive charge and burden to the country." Ordered, therefore, "that no common carriers, or other persons, do, upon the common highway, go or travel with any wagon, cart, &c., whereon is more than 2,000 weight, nor to use above five horses, or four oxen and two horses, or six oxen without horses, at any one time."—*Laud's History of his Troubles*, p. 247.

The New York Coach-Maker's Magazine.

MARCH 1, 1861.

E. M. STRATTON, Editor.

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"S. T., of Vt."—We can still supply you with complete sets of this work from the commencement, either in numbers or bound volumes.

RAREY'S SYSTEM OF SUBJUGATING HORSES.

Breaking horses—as it is vulgarly called—has been practiced among all nations from time immemorial to the present day. This, Rarey asserts, has been attended with barbarous and wicked treatment by fiends in human form. So prevalent had a system of cruelty become among some modern states, that "societies for the prevention of cruelty to animals" have been organized in the larger cities, calculated to ameliorate the miserable condition of the brute creation, brought about by *brutish* men. But the greatest reformer in this business is John S. Rarey, a native of Vermont, whose system is well calculated to do away with much of the labor attending the operation of educating the horse. "All the world and the rest of mankind" have heard of this gentleman's exploits in England, where his mild process was in marked contrast with the outrageous and cruel plan of "rough-breaking" as practiced among the hostlers there; but not until the present time have we had an opportunity to see for ourselves the practical operations of his system. We have already given in the first volume of this Magazine, with illustrations, the manner in which Mr. Rarey subjugates horses. In this article we intend to present the reader with some facts in corroboration of the effectiveness of his system, as proved by his series of lectures before a New York audience, at Niblo's Garden, where they were delivered to "crowded houses."

It was well understood that Rarey had "got his name up" in Europe by taming Cruiser; and as this renowned horse was to present himself for "the first time on any stage" in America, this fact alone was sufficient to create an excitement, and give an assurance of much interest to his lectures. An extemporized stable-yard having been prepared with boarded sides and rear, and a roped front and a sawdusted floor, overlaid with hay some ten or twelve inches deep, at the rising of the curtain in bounded the lecturer, with a dog-trot, until he gained the center, when he halted and thus addressed the multitude:

"Ladies and Gentlemen—It will afford me pleasure, in my lecture this afternoon, to explain to you the peculiarities in my system of horse-taming; to recount to you some of my successes, and to exhibit to you my power. I have but recently returned from England; there I met with marked success, until public attention was greatly interested in my exhibitions. Many converts to the system were made and much good was done, when a spirit of cavil was raised by some, and it was publicly stated that what I had done was all very well, but that there was one horse I wouldn't dare to touch. I at once wrote to the owner of the horse (which was the famous *Cruiser*), requesting particulars concerning his character, and also that he might be sent to me. The owner, Lord Dorchester, answered me courteously and fully; but said I would have to go to the horse, as he was too fierce to be sent to me. Quietly, and as I imagined unknown, I went to see the horse. I found that the half had not been told. He would bite, kick, beat, and throw. No one dared approach him. Having kicked to pieces his wooden box, they kept him in a brick one. He was heavily muzzled and strapped, and had not been out for three years. He would have been killed, but his owner hated to lose him as he was a very valuable horse, and of a noted blood breed. His sides were bruised and his hips scarified, and I was compelled to wait until he was healed before I could work on him, so I went back to London; but before I got there some one had put it in the papers that "Rarey had been to see *Cruiser*, and was afraid to touch him." Under this imputation I remained three weeks, then brought the horse to London, tamed him, exhibited him, satisfied the cavilers, and again went on successfully. With this brief introduction I will now proceed with the practical part of the entertainment, and present for your consideration the horse *Cruiser*."

At the moment in bounded the far-famed horse, fire in his eyes, blood in his nostrils, and with dignity in his bearing. The horse seemed to manifest as much curiosity as *his* Yankee audience by looking knowingly up and down, to the right and to the left, as if pleased with his new acquaintances, to whose thunders of applause he neighed a spirited response, fondling the lecturer with his head. Rarey having bid the animal to "present his foot like a gentleman," the horse obeyed accordingly; afterward both—the lecturer and the horse—promenaded up and

down the stage together, like two friends, until they became wearied in this exercise.

The next movement was to illustrate to the audience the manner of taming horses; and for this purpose he took from his pocket two leather straps, which are about the only instruments employed in the operation. Before describing the operation we will place before the reader the certificate of *Cruiser's* earlier *good* character, previous to Rarey's acquaintance.

"*Cruiser*, by *Venison*, dam by *Little Red Rover*, was bred by me in 1852, and I consider him to have been vicious from a foal; he was always troublesome to handle, and showed temper on every opportunity. On his road here from Danebury he went on his knees and tore the ground up with his teeth. I have seen him lean against the wall of his box and kick and scream for ten minutes together. In 1855 the Rawcliffe Stud Company and myself entered into an agreement respecting him, by which they were enabled to purchase the half of him on reasonable terms, provided they liked his stock; but notwithstanding the latter were much admired I was requested to remove him after the second season, his savage propensities rendering the care of him too dangerous an office for any man in their employ. I was assured by the manager of the Rawcliffe Stud, that for days he would allow no one to enter his box, and on one occasion tore an iron bar, one inch thick, in two with his teeth. If Mr. Rarey can tame him, I feel certain no horse can withstand his art. (Signed,)

"DORCHESTER.

"GREYWELL, *April* 3, 1858."

Passing his hand gently down the left foreleg of the horse, the lecturer quickly carried the strap around the fetlock, and pulling it up suddenly, deprived the horse of some part of his motive power, after which he was led limping around the stage. The next proceeding was to fasten the other strap, on the fetlock of the right foreleg, one end of which was secured to the belly-band for a purchase; the horse being then started was soon thrown upon his knees. After struggling a while, the animal "give it up" by rolling over on his side. While in this position, Rarey did pretty much as he chose with the horse, creeping between his legs, standing upon his body, and taking him by the head and pulling him around the stage, which must have been more painful than pleasing to *Cruiser*. Rarey having removed the straps, all of a sudden the animal made a plunge at an attendant, who, with folded arms stood in front of the horse in a contemplative attitude, *a la* Napoleon at Fontainebleu, and ran frantically around the stage, to the dismay of the audience, which the lecturer said was in consequence of some chafings the animal had received in crossing the Atlantic, irritated by the treatment he had experienced, by being dragged around the stage.

A second horse having been brought on the stage, Rarey made a grab at his bridle, when the horse naturally started suddenly back. "*That*," said the lecturer, "is the usual way of catching a horse. How would you like it if, meeting a friend in the street, he should catch you by the nose? Not much, I think. Well, the horse is just as sensitive about his nose as you are about yours. Treat him kindly and use him gently, and you can handle his head with perfect impunity; and not only that, but he will rest it against you, will smell of you, and even put his head in your pocket should it be large enough."

"I have often," he continued, "been angry with farriers for the bungling and careless way in which they took hold of a hoof, when about to shoe it. There is a right and a wrong way. Don't grab at it as if it was a roasted apple in a furnace, but begin thus: pat the horse's neck, pat his shoulder, lean yourself familiarly against the upper part of his leg, run your hand gently and soothingly down to his foot, and then easily, steadily (not steady by jerks), take it up—all motive for resistance being absent, the foot will be peacefully in the hand, the nerves are relaxed, and you can throw it up and up, so, and there will be no trouble. Now I will—although there is no absolute necessity for it in this case—apply the straps, as on *Cruiser*, and you will see the same results. There now, the strap is on, and the horse has learned his first lesson, namely, that though he can walk, and, so to speak, trot, he is powerless for evil. This is a very good way to use horses who are ugly in harness, and by the way, I will here say a few words about the reasons which impel horses to kick when in harness. They kick because they are afraid; looking back they see the wheels running after them, and they at once think—for think they do—that they ought to run too, and so they try it on; that being the case, the wheels keep up with the horse, and he finding that he can't get away, becomes still more frightened, begins to kick, and kicking, gets hurt, and being hurt, continues his fear until the wagon is smashed to pieces. Now, if the horse had been shown the wagon, had nosed it, and been aware of its peaceful nature, he would not be afraid. If not, he will do the same every time he is put before a wagon, and if he is not always so bad, he will invariably have fear just as you, who, having been bitten by a neighbor's savage dog, would never go by the house again without dreading a recurrence of the bite, and would keep a sharp lookout."

Mr. Rarey having gone through with the same operations, with the horse—who had in the meanwhile stood waiting—that he did with *Cruiser* at the opening of his lecture, continuing his address, said:

"There are a great many ways of harnessing and saddling horses. By some of them you can spoil the best tempered horse in the world; you can scare the life out of him; you can make him nervous, peevish, and fretful. In this, as in everything, the basis on which you should work, is, that the horse has common sense. If you put your hand before his eyes, if you go carefully behind him, he says to himself, 'That fellow's up to mischief.' But if you let him see that all is right, he don't care what you put on him. Now, for instance, I take this saddle (suiting the action to the words), and, first of all, show it to the horse. He smells of it, looks at it carefully, and makes up his mind that it won't hurt, bite or injure. I then put it,

thus, over his head, down his neck, on to his back. Then I take it and then throw it on him in this way. He has seen it, and don't object.

"In mounting a horse, many people go to work with the wrong end first, as indeed they do about everything. It's as simple as possible. You don't want to have all of your weight come on one side of the horse; if you do, the saddle is drawn on one side, and it is not easy for the horse to sustain it; but you should do so—place your hand on his neck, bearing thereon so that the hand shall balance the foot, then spring lightly in. You can do this as well when the saddle is ungirded as when tightly fastened. In the head the horse has immense power. No man can ever hope to hold in a running horse by pulling evenly upon the bit; he might as well try to lift himself over the fence by pulling at his boot-straps; it can't be did. When a horse's head is turned to one side he is compelled to so arrange his legs that they will properly balance him—he cannot run forward; therefore, my advice would be, if a horse is running away, or if he refuses to go, to pull tightly, as I now do, upon the right rein, and force the horse to describe a circle for an indefinite period of time, after which, you may depend upon it, he will not attempt the same trick. They profit by experience—of which fact, the old story of the ass, who was laden with sacks of salt, is an apt illustration. The ass, by lying down in the water, melted the salt and eased his burden, so that he frequently repeated the experiment, until his master, preferring an upright ass to a prone one, loaded him one day with bags of sand, which being wet by the donkey's trick, became so heavy that he could not rise, and never after did his lordship try the experiment. As it is with the saddle or the harness, so it is with all other articles, or even noises. Some horses are frightened by a band of music, and the noise of a drum sets them crazy. Now look at this horse; I hold this drum before him; he, as you perceive, regards it most intelligently. Now I beat it gently—he pricks up his ears; I beat louder—he don't care. I let him see me place it upon his back—he don't care for that. I beat like thunder, and he don't regard it as worthy of the least notice. So, ladies and gentlemen, you have seen that this horse, like the others, is entirely gentle, and in every way subject to my will."

The next experiment was with a rough-looking pony, who, coming on to the platform, planted his fore-feet firmly, and kicking, threw both his hind legs high in the air, while his tail stuck straight out like a broom. He evidently intended to make work for the tamer, but it was of no avail; the straps soon caused him "to secede." At first the pony did not seem to relish the treatment he was receiving: now he threw himself off his feet; next down on the floor; now on this side, and then on the other; with eyes flashing and his ears in constant and rapid movement, with a panting body and distended nostrils, whisking his tail—all indicating that he was in the hands of his superior, and that he must finally succumb to inexorable fate. During these struggles on the part of the pony, the tamer stood entirely self-possessed, watching every movement, or manipulating as circumstances might require. These exercises brought the perspiration to his face, which rolled in streams down his cheeks, in removing which he completely saturated two handkerchiefs. But the pony was subdued. Rarey is sure to conquer every horse he takes in hand.

After stating that he "had received letters from several horses in the country, who had not yet arrived," Mr. Rarey read to his audience the following letter from the owner of the next horse to be brought in for taming:

Harlem Lane, Jan. 2, 1861.

J. S. Rarey, Esq.—*Dear Sir:* Having heard that you are in want of vicious horses, I beg to inform you that I have a very fine stallion, that has cost me $2,700, but so vicious that I have not been able to do anything with him for the last four years. He is the worst horse I have ever seen, and, I believe, one of the worst in the world. During this time, I have not been able to put a harness on his back, or shoe on his foot, or even take him out of his stable. He has bitten several men severely, to my certain knowledge, and is said to have killed two. I believe him to be a dangerous animal in every respect, either in kicking, striking, or biting. I can hardly believe any man will ever be able to manage him, but, if you wish to make the attempt, you are welcome to try him.

Yours, &c.,

(Signed,) E. Luff.

The animal having been produced, proved to be a fine-looking one, with a heavy iron muzzle over his mouth, and as if to give a sample of his propensities, tried to seize Rarey's arm. But it was of no use. In about eight minutes this vicious horse "was tamed all over," and Rarey was pulling him about the ring in his masterly manner. The owner had previously cautioned the tamer against letting the horse take hold of him, declaring that he would never let go his hold; but to the astonishment of the audience, Rarey not only ran his arm through the horse's mouth, but let his naked hand remain there some minutes without receiving harm. After this, lifting his feet at will, he mounted the back of the animal, proving that he had gained another victory of mind and courage over brute force.

In conclusion, the lecturer, by special request, produced on the stage two Shetland ponies, one a stallion, five years old and only thirteen inches high, which he had brought with him from Europe. Mr. Rarey thinks that these ponies are diminutive descendants from the Arabian horse, imported more than two centuries ago from Africa. This pigmy size he attributes to a long course of starvation, pursued for many years in the Shetland Islands. Mr. Rarey, who has lately returned from the Deserts of Arabia, gives it as his opinion that the horses to-day in that country are fully two hundred years behind the best English thoroughbreds in point of shape, endurance, and beauty.

Since the delivery of this, his first lecture, Mr. Rarey has favored the public with four or five more, in all of which he has redeemed by his successes all he has prom-

ised to the public. The only difficulty he complains of is, that after having offered through the press a large sum for the most vicious horses to be found anywhere, he is not able to find any as vicious as he desires.

We have thus gone through with some of the doings of this wonderful horse-tamer, not because horse-taming is exactly a part of coach-making, but knowing, as we do, that without horses the coachmaker's occupation would soon be gone, and that whatever tends to subdue and bring these noble animals under our subjection, must prove beneficial to the craft to which we belong, and advantageous to the public generally.

ENGLISH SHORT-TIME MOVEMENT.

It would seem from a report found in the columns of our London cotemporary, that, unlike the custom prevailing in this country, the journeymen labor more or less hours daily in different localities in England. To correct these inconsistencies in some measure, the operative coach-makers in the ancient city of Bristol called a meeting for the 20th of November, "to take into consideration the best means of obtaining a reduction of the hours of labor."

The chairman, in opening the meeting, stated that the present was the result of several previous meetings, from which the petitions of nearly two hundred journeymen had been sent to the employers, asking them to take into consideration the present hours of labor, and requesting a modification in the number of those hours. A deputation had also waited upon and argued this subject with them, but notwithstanding that a very small boon had been asked for, the employers would not grant it. This the operatives thought very unkind, and that they were not fairly dealt with, as they only sought to be placed upon the same footing, in the number of hours for daily labor, with their fellow-workmen in Yorkshire, Lancashire, and Lincolnshire, which was only one half-hour per day less than the hours now occupied. While the workmen in Bristol are only getting, on the average, 22 shillings ($5.33) per week, the men in the north of England are receiving 36 shillings ($8.72) for the same period; and yet the Bristol employers would not make the half-hour reduction! The chairman inquired, "How is it that the masters in the north of England can pay almost double the wages the Bristol masters are paying, and are able to give the men a half-a-day's holiday on a Saturday besides? When we look at this fact, it behooves us to exert every nerve in order that we may be put on the same footing as our brother operatives in other towns. I am sure it is a very reasonable request we make to the masters; and it must be remembered that the coach-makers in Bristol work longer hours than almost any other trade in the city. * * * The masters say that those who are dissatisfied with their present hours are only a few drunken characters, who are desirous of getting up a little commotion to agitate sober men; but I deny this. The operatives have conducted their business so far as quietly as they possibly can, and they have solicited the masters in the most courteous manner to agree to their requisition. Some of the masters have combined, and we have just as much right to do so as they have. The operatives have begun, and I hope they will go on. Some of the masters talk of increasing the hours of labor, now that the men have begun to talk of getting them reduced; but I can scarcely believe it possible that such a thing will be attempted."

It would seem that the operatives only desired the hours for labor to be so altered that they might commence at 6 A. M., and leave off at 6 o'clock P. M. This, allowing an hour for dinner, would limit a day's labor to 11 hours. In addition to this, the operatives ask to be allowed to leave off at 4 o'clock on Saturdays, which, if granted, makes a week's labor about one hour longer than with us in America. Whether this request will be granted remains to be seen; but, in view of the fact that "all work makes Jack a dull boy," and that some time is required daily for intellectual improvement, we hope to hear that the very reasonable requests of the Bristol operatives have been favorably considered.

TIMBER FOR COACH-MAKERS.

The carriage-business is of a nature so peculiar, that it is of the utmost importance that manufacturers should at all times have on hand a good supply of well-seasoned and well-selected timber. This every manufacturer who has been in the business long must have learned from experience. At how dear a rate has many a coach-maker obtained this knowledge in the first year! Having very little experience in practical business life and taking everybody to be as honest as himself, he, with limited means, goes to a lumber-merchant and purchases a quantity of "stuff," which he is told is *dry*. Now, there is a vast difference between seasoned and dry timber. No one knows this better than the lumber-merchant, and yet we have known many—*honest men*, no doubt—who would, if they could, palm off upon the unsuspecting an article represented as dry, which, when it come to be worked, would be found as *green* as the duped purchaser.

Some may say, We never go to a lumber-yard for our stock. Then you are fortunate. But there are a great many new beginners—for such we are writing—whose purses are limited, and whose credit has not yet become established, who are obliged to do so. The consequences are, that they are soon taught a lesson for which they are called upon to pay dear in the school of experience—that to trust to the word of a lumber-dealer will never do.

The joints in that newly turned-out carriage—at a time of all others, *the* time for establishing a reputation for good work—very soon convince the manufacturer, as well as his customer, that a "screw is loose somewhere." Perhaps the want of seasoned timber is one of the most serious drawbacks a beginner ever finds in his business pathway. To remedy this every carriage-maker should select, if possible, and have a stock housed and seasoning for at least one year in advance of his time for commencing, especially should his business require a large proportion of oak. Six months of summer weather *might* do for ash and hickory, although advantages would be obtained by giving them—although more quickly drying—a longer time. From a long experience at the business we have found that the best capital a carriage-maker can have, is *a capital* supply of *well*-selected and *well*-seasoned timber. Iron and other materials can be purchased as needed, but with timber the case is different, *it must be well seasoned*, or it will be found impossible to turn out a creditable carriage.

MISSING NUMBERS.

This Magazine is carefully mailed to every one of its regular subscribers on the 24th day of the month preceding that from which it is dated, and should reach its destination in the most distant part of the country in due course of the mails. Should subscribers' copies fail in coming to hand before the next number is due, they should immediately inform us of the failure, and where possible, confirm it by the postmaster's endorsement, when we will send a second number. Those who neglect to do so must not expect us to supply missing numbers, except when payment for them at the regular rates is enclosed in their orders. We are determined to discountenance dishonesty, and ask it as a favor that our honest friends will assist us in this matter. While on this subject we would state that we are constantly in the receipt of letters asking us to send the writers specimen copies of this work, when often the contents of the letter itself are sufficient evidence to us that they are only *sponging*, without the least intention of becoming subscribers. For such we have prepared a circular, which, if it does not meet the wishes of some, will be all they will get until specimen numbers are paid for. In *selling* specimen numbers, we engage to deduct the costs from after-subscriptions, if the number so purchased is designated at the time of sending us payment.

TO OUR WESTERN FRIENDS.

When making their remittances our Western friends will do us a great favor by sending Eastern funds, when such can be done, or the gold, secured to a card so as to avoid its shaking out in the transmission through the mails. Western bills, just now, are at a heavy discount in New York.

LITERARY NOTICES.

The Historical Magazine.—We consider this one of the best periodicals in America. Eschewing the "sickly sentimentality" so eagerly devoured by vitiated minds, it deals in historical facts, in solid literature, really refreshing and strengthening to the reader. The number for February is a capital one, illustrated with several *facsimile* copies of the wood-cuts accompanying the earlier editions of the voyages of Columbus to the American continent. No lover of sound literature should neglect to secure this work for his library. Published monthly in New York, by C. B. Richardson & Co., at $2 a year.

Among our exchanges, we find that our friend Orange Judd, of the *American Agriculturist*, in New York City, and our friend Moore, of *The Rural New Yorker*, at Rochester, have made several important improvements in their respective periodicals; the last being very much enlarged. We recommend them both to the public as being the best of their class, and invaluable to any one having a garden or farm to cultivate.

EDITORIAL CHIPS AND SHAVINGS.

Taxing City Railway Cars.—On the 7th of February, Marshal Burnham issued licenses for the Eighth and Ninth Avenue cars, to date from Jan. 1, 1861, as follows:—On the Eighth Avenue Railroad, 50 two-horse cars, at $50 each, and 18 one-horse cars, at $20 each, amounting to $2,950. On the Ninth Avenue Railroad, 36 cars, at $20 each, amounting to $720. On the 8th, the Marshal issued licenses to 40 two-horse cars at $50 each, and to 20 one-horse cars at $20 each, all belonging to the Sixth Avenue line, and amounting to $2,400, adding to the city revenue, in two days, about $6,000. The Second, Third, and Fourth, Avenue Cars, are yet to be licensed, should the question as to their legal liability to pay be decided against the companies.

Swindling Aldermen, in Carriages.—With a view to stop the fast riding of our *fast* Common Council in New York, the Legislature of this State, in 1860, passed an act, allowing each member a salary of $1,200 for the year, "to be in lieu of, and to include all expenses and charges for carriage-hire and other expenses as such members." But these *dignitaries* are not to be thus thwarted, not they. "Free and easy" practices have too long been enjoyed by "our city fathers," to be relished when furnished at their own expense, and so, under the convenient title of "city contingencies," the past year they spent for us nearly $11,000, exclusive of that expended on the Japanese, the Prince of Wales, the Fourth of July, and other public occasions; the whole probably amounting to $90,000. The following are some of the items charged to committees of the Aldermanic Board:

Alms-House Department	$310 86	Ordinances	$415 83
Arts and Sciences	205 00	Police	403 93
Assessments	629 50	Public Health	362 55
Cleaning Streets	307 37	Public Buildings	40 00
Croton Aqueduct	618 35	Railroads	894 50
Ferries	617 25	Repairs and Supplies	666 28
Finance	573 00	Roads	412 75
Fire Department	408 63	Salaries and Offices	246 99
Joint Com. on Accounts	288 25	Sewers	241 12
Lamps and Gas	343 50	Streets	487 11
Lands and Places	558 75	Taxes	334 12
Law Department	330 12	Wharves and Piers	579 37
Markets	614 38		
Total			$10,889 56

As if still further to bleed the dear people, the Comptroller, who pays these bills without scrutiny, estimates these contingencies for 1861, to be $185,500. Worse still! Who would *not* be an Alderman of New York City, when the tax-payers allow them such rare indulgences? And who would not be coach-maker to an Aldermanic Jehu?

Street Indicator.—A contrivance with this name has been placed in one of the Philadelphia street cars. Arrived at a street, the driver rings a bell to attract the passengers' attention, and immediately there appears the name of the street, in letters sufficiently plain to be read. This avoids all disagreeable exposure of the traveler to the cold air from the opening of doors, as the indicator is operated from the outside of the car.

Cement for Wood.—Common shellac dissolved in alcohol, is said to make a cement for wood far more effective than glue—to join the parts together stronger than if they had never been separated.

Another cement for wood, leather, &c., can be formed by mixing white glue (or gelatine), 4 lbs.; dry whitelead, 1 lb.; soft water, 4 quarts, and alcohol, 1 quart. Boil the glue and lead in the water by means of a water-bath. The glue being dissolved and the alcohol added, stir the whole until they are well mixed. Pour the whole into a phial for future use.

Tax on Carriages at the South.—The "Independent State of South Carolina" proposes to lay a tax of $2 50 on all carriages, and $1 25 on buggies and other light vehicles, to aid in maintaining her war-*footing*. This will be the first instance where those who *ride* will be forced to pay a tax to those *footing* it.

The Coach-Maker's Letter-Box.

LETTER FROM TENNESSEE.

Chattanooga, Jan. 28th, 1861.

Mr. E. M. Stratton:—*Dear Sir*, I believe that I promised to write you again. I have not traveled any since you gave me an agency for the Magazine, for this reason: I found out that the times were a great deal harder than I had any idea of. I have tried to induce the craft to take it here; but the times, they say, are so hard that it takes every dollar they can get to keep body and soul united, which I have found to be a fact. The carriage business is in a backward state in this town. It cannot boast of a single shop, unless I can call an old, dilapidated barn one, which is none the better for wear; yet I have not seen a better place anywhere for a young man (or an old one either) to start in the carriage business, as there is plenty of good timber, together with coal, besides iron enough in these mountains to supply the world for a number of years. Besides, there are no carriages brought here from the North. Business is very hard here now—no sales at all. I have not worked a week since I left the North, which is now very near three months. I shall leave here on next Saturday. I am going out of the Union, and have found a job in Georgia. Business seems to be getting better in that State, but there will not be much done in any branch of business until the present difficulties are settled.

Yours, most respectfully, J. L.

LETTER FROM NEW YORK.

Rochester, Jan. 29th, 1861.

Mr. Editor:—*Dear Sir*, I have this day been reading over the pages of your valuable Magazine, and I find in Vol. III., Number 9, page 177, some weighty remarks offered as to the practical utility and durability of my new metallic carriage-wheels, and feel satisfied that your own good sense will not allow you to be so contracted in opinion as to judge and condemn before you are acquainted with what the article is composed of, or even with the *mechanical ability of the patentee*. My wheel does possess *novelty*, simplicity, and durability, combined; and it is believed by *good judges* that it will come into general use, after the public is satisfied that it possesses no "spider-leg spokes," nor even a particle of the principle or material of those you refer to as having been made fifteen years ago, independent of the tire, which will be of wrought iron in all cases.

As it regards my motive, I hope it is genuine, and my motto is "Onward!" giving honor to whom honor is due. Had I known before of your superiority in the carriage business, I most certainly should have consulted you. [Here the Editor blushes "all over."] The reason there was no more explanation as it regards the wheel, is that I am getting up a set of wheels, and intend running a buggy as a proof of its utility. In the meanwhile a plate is being engraved, and an advertisement prepared for all the prominent journals in the States (South Carolina not excepted), your Magazine being number one. I conclude by saying that the right of this wheel is for immediate sale, as it was got up for the benefit of all whom it may concern.

Yours, &c., J. P. Fisher.

[We like the tone of the above letter so well that we give the writer the benefit of its insertion in our widely-circulated Magazine. Instead of "blowing us up," he talks like a sensible man, and believing that it takes a sensible man to make a truly ingenious inventor, the logical deduction is that we were a little too hasty in our criticism—*if it had any reference to Mr. Fisher's wheel.*—Ed.]

LETTER FROM NEW JERSEY.

Newark, Feb. 5th, 1861.

Mr. Editor,—I have read the letter from a correspondent signed R. Lurkins, in your February number, in reference to the supposed impracticable working of the so-called French rule. I respectfully dissent from his

opinion. I have never found the rule otherwise than geometrically correct, in working any kind of a body that is curved on the sides and ends, including the arm-rails and bottom-sides at the juncture of the corner pillar.

If the bottom-side and back-corner pillar were in three pieces, would the difficulty Mr. Lurkins complains of still exist, supposing one joint was near the back standing-pillar, and the other joint some distance up the back? I repeat—would the difficulty in the irregularity of the outside surface exist at one or both joints? With reference to *that third curve*, I would inform the modest gentleman that that method was known *before I was born!* Now, Mr. Editor, if the gentleman wants to know when that auspicious event took place, you can tell him that my beard is now old enough to be very wiry.

Yours, respectfully, A. D.

[With this letter we are put in possession of the rule for working out an arm-rail, which want of room obliges us to defer publishing until we issue the April number.—Ed.]

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

[Reported expressly for the New York Coach-maker's Magazine.]

AMERICAN PATENTED INVENTIONS.

*** To Inventors.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

January 1, 1861. Improvement in Feeding Mechanism for Spoke Machines.—Eliakim Briggs, of South Bend, Ind.: I claim the arrangement of the screw, D, wheel, E, attached to block, G, the chord, N, attached to arm, I, and axis, F, of wheel, E, catch bar, T, and sliding clutch, H, all arranged for joint operation as and for the purpose specified.

Improvement in Self-Adjusting Carriage-Seats.—J. C. Kimball, of New Haven, Conn.: I claim so constructing and connecting the two seats, that the curvilinear motions of all parts of the forward seat, when the two seats are constructed, connected and made to produce the result, substantially as described.

Improvement in Automatic Brakes.—John Wilkinson, of Baltimore, Md.: I claim operating carriage-brakes by the vibration or rocking of the axle, substantially in the manner and upon the principles set forth; and for this purpose I claim the sub-bolster, *b*, and its pillar, *h*, combined with the main bolster, *a*, as set forth.

Jan. 8. Improvement in Couplings for connecting Thills to the Axles of Carriages.—Wm. H. Saunders, of Hastings, N. Y.: I claim the combination of the center piece, strap, elastic tube and pin of the clip, substantially as specified, whereby the tension of the elastic tube causes the center piece and strap between which it is compressed to gripe and hold the bolt, or equivalent, by which they are secured to each other, as set forth.

Jan. 15. Improvement in Perambulators or Children's Carriages.—J. A. Crandall, of New York city: I claim, *first*—The general form and arrangement of the handle frame with its wheel, substantially as described, whereby the same vehicle can be converted into a gig or a perambulator at pleasure.

Second—The special mode of clamping the handle frame in whatever position it is set, as described.

Third—The method described of increasing the adhesion between the sides of the handle frame and the face of the collar on the spindle.

Improved Mode of Hanging Carriage Bodies.—C. C. Stringfellow & D. W. Swiles, of Lumpkin, Ga.: We claim the transverse ties, G, G, arranged and operating substantially as and for the purposes specified.

Improved Dumping Wagon.—John Wilkinson, of Baltimore, Md.: I claim supporting the body, *a*, upon arched railway guides, *b*, as set forth; and, in combination therewith, I claim the triangular anti-friction yoke, *e*, as set forth. I also claim the self-locking catch, *h*, arranged and operated as set forth.

Jan. 22. Improvement in Hub Machines.—I. N. Fetch, of Hollis, Maine: I claim the combination lathe attachment, the arrangement of the reciprocating knife frame, and the vibrating swing feed frame, in the manner and for the purpose set forth, and boring the hub while it is being turned by pressing up the auger through the hollow spindle.

Improvement in Weighing Carts or Wagons.—N. E. Doane, of Hannibal, Mo.: I claim the lever frames, G, G, rod, H, parallel bars, D, D, levers, I J, graduated beam, K, and frame, L, combined, arranged, and applied to a cart or wagon, as and for the purpose set forth.

Improvement in Wood Bending Machines.—Hiram McDonald, of Union Springs, N. Y.: I claim the eccentries, *l m*, sliding plates, *o p*, slides, *t u*, and the keys, *r s*, placed at the outer parts of the beds, F F, and arranged substantially as and for the purpose set forth.

Improvement in Fare Boxes.—W. B. Bartram, of Norwalk, Conn., assignor to A. S. Dodd, of New York city: I claim the giving of exact change, as desired, by means of tubes, A, adapted to different coins, in combination with the open valves, D, levers, B, and springs, E, constructed and operated substantially in the manner and for the purpose set forth.

And, in combination with the above, I also claim the money-box lever, M, movable plate, U X, bell, J, and register, R,—the whole being constructed and operated substantially in the manner and for the purpose set forth.

Improved Tire Heater.—Alfred Ingells, of Independence, Iowa: I claim combining with the horizontal circular furnace described, the inside eccentric partitions, D D, movable covers, C C C, the dampers, *e e* and *g*, and supporting rods, *p p p p*, all arranged substantially as and for the purposes described.

Jan. 29. Improvement in Fare Boxes.—J. B. Slawson, of New Orleans, La.: I claim constructing the receiving chamber, C 2, of glass plates, *e e' d d'*, in the manner and for the purposes substantially set forth, in combination with the side, D, and drawer, B, the whole being constructed and operated substantially in the manner and for the purpose set forth.

Improvement in Adjustable Carriage-Brakes.—J. A. Letts, of Trumansburg, N. Y.: I claim the combination of the lever, M, the crank-shaft, N, connecting bar, N, made adjustable by means of the plate, T, and bolt, V, the same acting on the brake bar, O, and the rubber, W, as described.

RECENT EUROPEAN PATENTED INVENTIONS.

Oct. 18. Alfred V. Newton, Chancery Lane, London.—Improvements in the construction of passenger carriages.

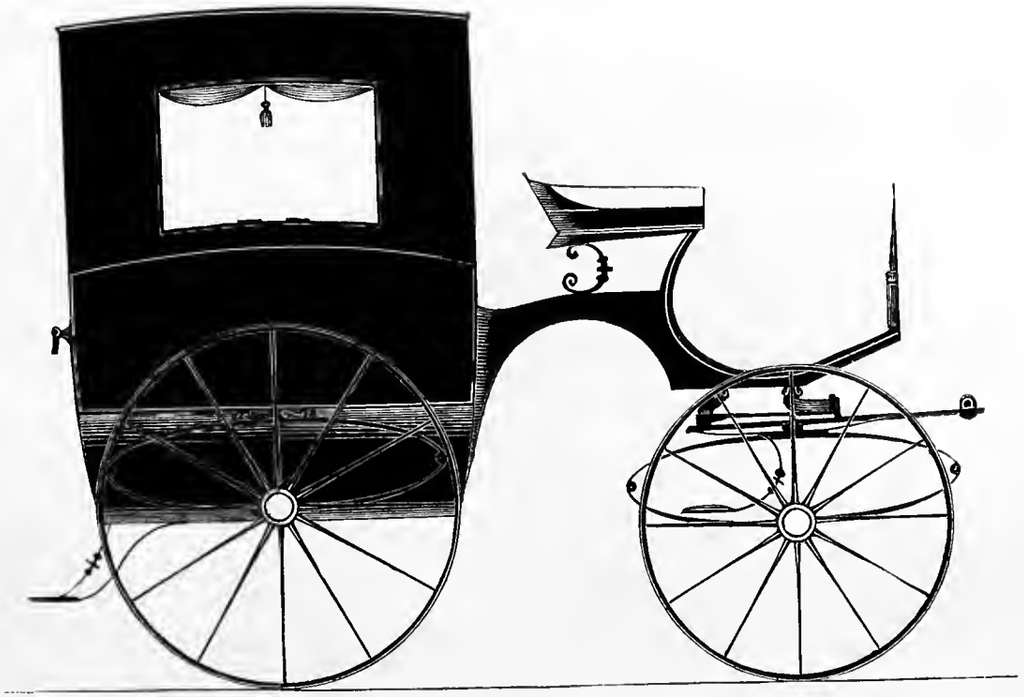
25. John Richards, Tipton, Staffordshire—A new and improved brake for arresting or stopping carriages or trucks on inclines.

26. Elijah F. Prentiss, Liverpool, Lancashire—Improvements in cars or carriages to run on street railways or tramways.

Nov. 1. John Bettyes, Upper Gloucester street, London—Improvements in carriages and carriage springs.

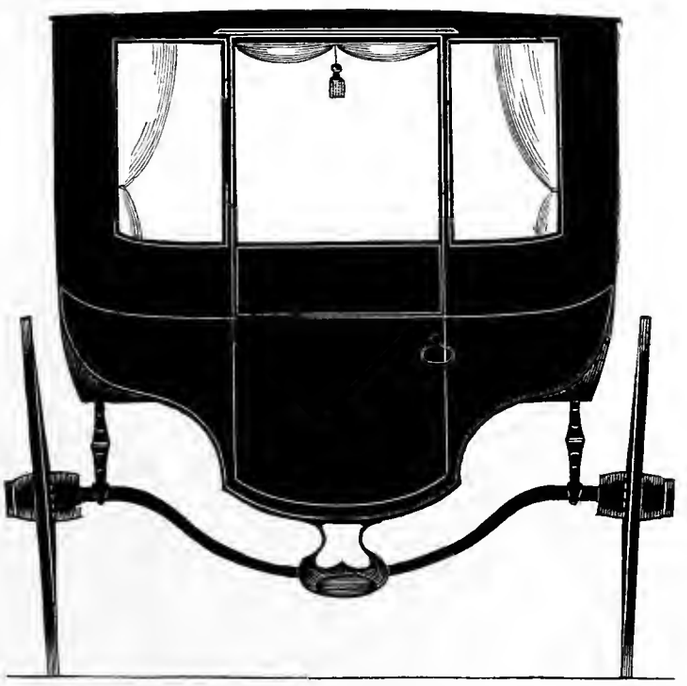
3. George Shillibeer, City Road, and George Giles, Fenchurch Buildings, London—Improvements in the construction of omnibuses and other vehicles.

8. James Cutts, Liverpool, Lancashire—Improvements in apparatus for ascertaining or indicating the number of persons that may pass through or over any particular place, applicable to omnibuses and other vehicles.



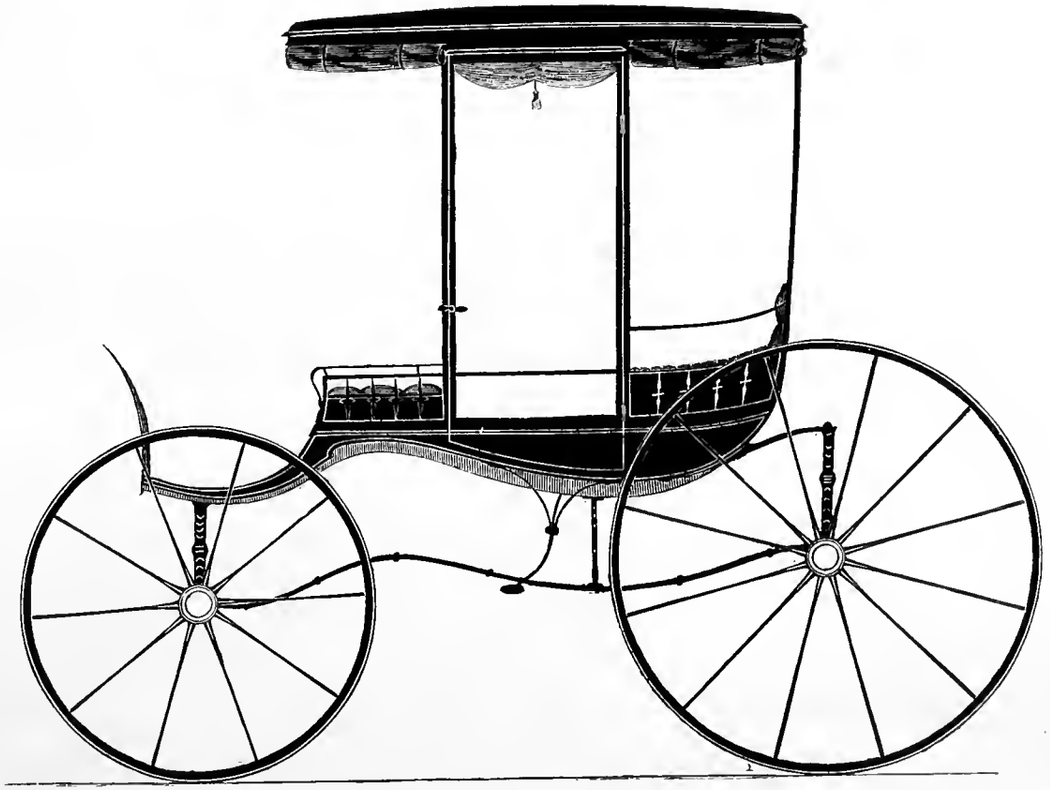
THE OSTEND SOCIABLE.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 211.



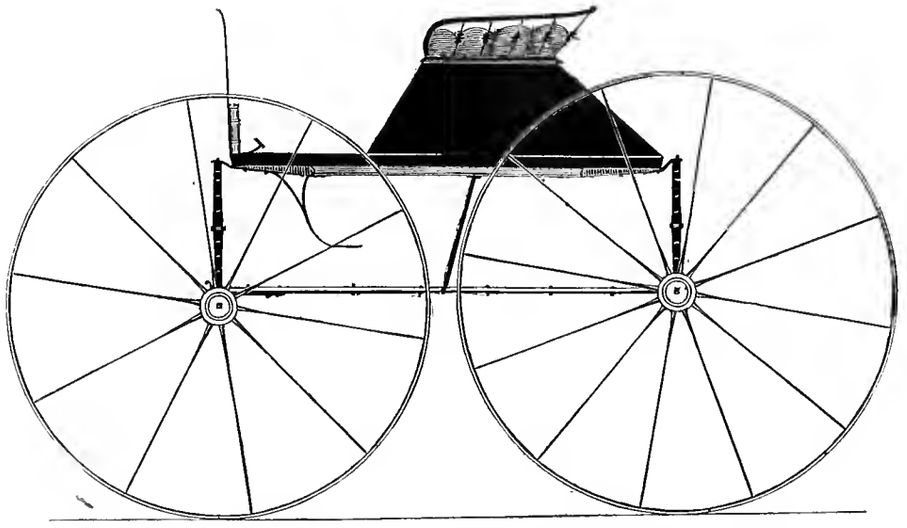
BACK VIEW OF OSTEND SOCIABLE.—$\frac{1}{2}$ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 211.



LANE'S ROCKAWAY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine.—Explained on page 211



CLIPPER BUGGY.—½ IN. SCALE.

Engraved expressly for the New York Coach-maker's Magazine. *Explained on page* 211.

THE NEW YORK
COACH-MAKER'S MAGAZINE

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, APRIL, 1861. No. 11.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

PRINCIPLES OF DRAUGHT.—No. III.

BY S. EDWARDS TODD, ESQ.

Wheel vehicles—United draught of animals hitched abreast or tandem.

(1.) WHY will a team haul a load, *any considerable distance*, on a vehicle of *four* wheels, with less fatigue than they will the same load on a vehicle of only *two* wheels? (2.) Why is a team able to haul a given load when they move in a *circle*, which they cannot haul when they go straight forward? (3.) Why does a team have to draw harder to haul a given load, when they are hitched at the *hind* end of a wagon, than they do when hitched at the forward end? (4.) When a team is hitched to the *hind end* of a wagon bearing a load which they are scarcely able to haul when moving straight forward, why can they not move it, when the forward wheels are cut, or "cramped," so that the wagon will move in a small circle? (5.) Suppose, for instance, that the hind wheels of a loaded wagon are placed on the *forward* axle-tree, and the fore wheels on the *hind* axle-tree, why will a team be much more fatigued by hauling a given load, than they *would* be, if the wheels were not reversed?

These are not idle, nonsensical questions; but may properly be called *interrogative affirmations;* and we shall proceed to expatiate on them, and to show why a carriage-maker, as well as a teamster, should have a good knowledge of the principles of draught.

For the sake of being *systematic*, we have numbered our interrogatories, and shall enlarge on them under corresponding numbers.

(1.) When a load is resting on a vehicle of only two wheels, it is very seldom placed so as to balance just right. If it is correctly balanced for level ground, it will be found that when the team begin to ascend a slope, they are obliged to make an extra exertion, which would not be necessary, were the load a little farther forward; and, when traveling over rough and uneven roads, when a wheel encounters an obstruction half the load must rise at once, when it is on two wheels; and when a wheel goes into a hole, a far greater exertion of a team is necessary to draw it out, than if the same load were on four wheels. Stand and look at a team for a moment which is hauling a load on a cart, over a rough track, and it will be seen that they are jerked and thrust this way and that way, which worries and fatigues them far more than the same load would were it resting on *four* wheels. It is not denied, that a team accustomed to a cart will haul a heavier load, for a short distance, on a cart, than they can draw on a four-wheeled vehicle; because a good part of the load may be placed forward, so that the *team* will carry it, instead of the wheels. But it is very fatiguing for a team to *carry* a good portion of their load, and to draw at the same time. But when a load rests on *four* wheels, during a good portion of the time, when traveling on good roads, but a very small exertion of the team is required to draw it; and many times it will keep moving of its own gravity, which greatly relieves a team; but when they are compelled to *carry* much or little of their load, there is but little relief; and a team will be greatly fatigued *by carrying* a given portion of their load, which would move along, producing little or no fatigue, were it resting on four wheels.

For the reasons already assigned, a man can convey a hundred pounds or so on a *wagon*, when the distance is long, with much less fatigue than if it were on a wheelbarrow or a cart; but for a *short distance*, a cart or wheelbarrow would be preferable to a wagon.

(2.) The great advantage of allowing a team to move in a circle is well understood by every good teamster, even if he is as illiterate as one who can neither read nor write. When a good teamster wishes to haul a load up hill with as little fatigue to his team as possible, instead of moving *straight up*, he will drive them in a *zig-zag* direction, which is equivalent, with a team and load, to moving in a circle. By allowing a team to move in a zig-zag direction, there is a two-fold advantage when they are ascending a slope; and one is,—and it holds good on level ground,—when they move in a *small* circle their force is applied to moving the load something on the principle of the lever. For example: If a wagon is loaded with a long stick of timber, say 40 or 50 feet in length, as it is about as much as a team can draw, they

can draw it up hill by moving in a zig-zag direction, if the wheels are 40 feet apart, with less fatigue than if the same load were resting on wheels 8 feet apart.

The philosophical reason for this is, the team moves much farther than they would, were they to go in a direct line; and the forward portion of the load does not move as fast, nor go as far as the team; and the hind wheels move still slower than the forward ones, in proportion to the distance they are from them. Of course, more time is required to haul a load a given distance; but what is lost in *time* is gained in power, which is a consideration of no little importance in very many of the practical concerns of life. By driving a team three or four rods diagonally, to the left, and then as much farther to the right, they will move along with a heavy load, either on a level or ascending a slope, which they could not haul in a straight-forward direction. The farther the hind wheels are placed from the forward ones, the greater the load a team can get along with; but when they are moving *in a straight line*, the draught will be increased as the distance from the fore wheels to the hind ones is increased, providing an equal number of pounds rests on each pair of wheels. By constantly hawing and geeing, a load may be hauled on a cart, which could not be drawn on a wagon; but for ordinary purposes, either on a farm or in the city, a team will perform more, with much less fatigue, when hitched to a wagon, than they will when hitched to a vehicle of two wheels.

There are instances where rivers run fifty or sixty miles *circuitously*, to get *twenty* miles in a direct course, in order that the current may be less rapid; and, on the same principle, a team will move on a track more level, when ascending a slope, by going in a zig-zag course, than if they were to go directly up it.

(3.) Our third division of this subject brings us to that part which will be rendered more intelligible by Fig. 4, which represents an old Connecticut ox-cart. It will be perceived, that the tongue does not stand at a right-angle with the axle-tree. If the end of the tongue stood at *B* instead of *A*,—which points are about six inches apart,—it would stand at a right-angle.

Now, I will ask a question, which almost any farmer boy can answer intelligibly, which will enable us to make a more practical application of the principle involved in this subject: Why is it not just as well to have a cart-tongue, wagon-tongue, or perch, stand like the cart-tongue in the figure, instead of standing at a right-angle with the axle-tree? Because, in order to have a wheeled vehicle run with the greatest possible ease, the wheels must roll exactly in the same or in a parallel line with the movement of the team. Now, by referring to fig. 4, it will be seen, that, were the wheels to roll *straight forward*, in a line at a right-angle with the axle-tree, they would go directly to *E E*, were the force applied in the line to *B*. But, by setting the end of the tongue at *A*, as in the figure, the wheels would *roll* in the direction of *E E*, while the team and cart would all move in to *F F*. As the wheels do not *roll* exactly in the direction of *F F*, they must *slip* a little sideways, *constantly*, in order to arrive at *F F*. As a matter of course, this slipping or sliding, as the wheels revolve, increases the draught of the vehicle. The distance from *A* to *B*, and from *E* to *F*, is but little, it is true; but, supposing a given force will draw a loaded cart the length of it, when the force is applied in the direction of *B*, when the tongue stands at *A*, and the wheels

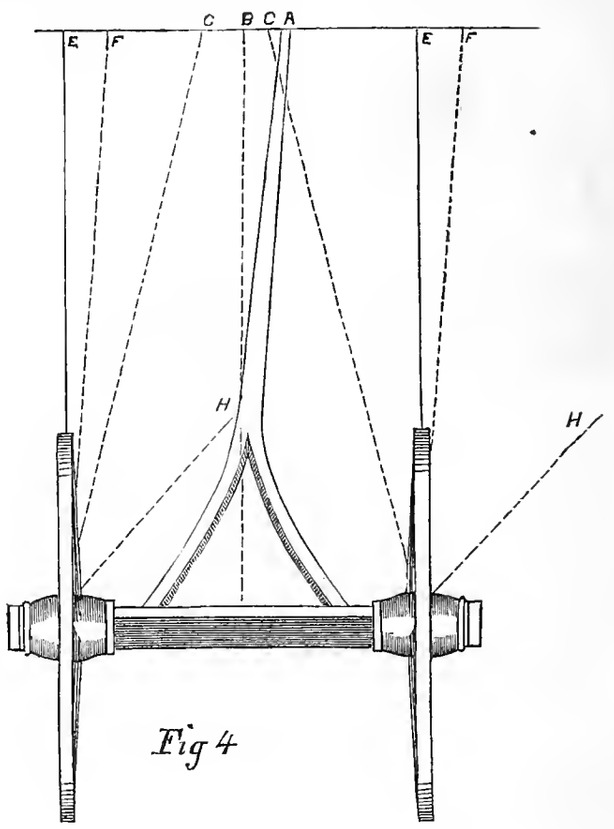


Fig 4

are set to roll to *E E*, it will require an *additional* force to move it the length of it. This additional force would be *almost* equal to a force sufficient to move it directly from *E* to *F*. In order to move with the least possible force of a team, *it is very important that the wheels revolve exactly in the direction that the moving force is applied to the vehicle.*

From the foregoing considerations, we shall discover the propriety or *im*propriety of

SETTING AXLE-ARMS FORWARD.

On account of the tapering form of axle-arms, there is a tendency of the wheels to run off against the nuts. To *counteract* this tendency, carriage-makers, in days long gone by, were accustomed to make the forward side of the axle-arms *on a straight line with each other*, which would set the wheels to roll in about the direction of *C C*. This caused the wheels to run hard against the shoulders of the axle-arms; and as they rolled along, there must be a constant sliding of the wheels, which is very perceptible to the eye, when standing behind them. Taking all things into consideration, I believe it is now conceded by our best carriage-makers, that a carriage will run easier when the arms are not set forward nor backward, than they will when they *are* set forward more or less. I have given this subject a most thorough investigation for more than twenty years; and have experimented on an extensive scale, and I am well satisfied that axle-arms should never be set forward. Were the wheels set to revolve in the direction of H H, if the moving force applied at *B*, the wheels would *slide* along towards *E E*, without revolving at all.

The most expeditious and practicable way to ascertain

whether a tongue, or perch, stands at a right-angle with the axle-tree, is, to measure with a pole, from a given point on the forward side of each axle-arm, to the middle of the end of the tongue, or perch. If the distances are equal, it is all right.

(4.) From what has been penned, it will be perceived that when a team is hitched to the hind end of a carriage, and the forward wheels are cut or cramped, they do not revolve in a line parallel with the direction of the moving force. If the wheels be cramped much, it would be like applying the force in the direction of H H, fig. 4, while the wheels are set to roll towards *E E*. Therefore, a load that a team can draw, when they are moving in a circle, or from right to left, they cannot draw a single foot, moving in a circuitous direction, if they be hitched at the hind end. When the axle-arms are not set forward, a wagon will run backwards, as well as forwards, with equal force, providing the forward wheels are not cramped. But, as the wheels are cramped, the draught is increased.

(5.) The fifth question involves the subject alluded to on page 181—the slope of the traces. On a good, smooth track, there would be no perceptible difference in the drawing of a team, whether the hind wheels of a wagon were on the forward axle-tree, or were in their proper places, unless they were very large. But, let the order of the wheels be reversed, when the roads are quite muddy, and it will be discovered, at once, that a team will travel with a load with less fatigue, when the hind wheels are on the hind axle-tree, than they would if they were put in the place of the forward wheels.

There is a great fault in the manner of hitching to wheel vehicles, and especially to carts. The whiffle-trees are decidedly *too high* for easy draught, on most wagons and carriages. If, by some contrivance, the whiffle-trees on our city omnibuses and stages could be attached one foot lower than they usually are, the teams would perform their labor with far less fatigue than they do at present, with the whiffle-trees *above* a tongue six inches higher than it ought to be.

Manufacturers of agricultural implements, if they understand, as they should, the principles of draught, make calculations for hitching the whiffle-trees or draught chains but a few inches from the ground. This is true of some cultivators, grain-drills, and rollers, which all have the whiffle-trees *below* the thills and the tongues. Were the track always horizontal, and free from obstructions, there would be less advantage in having the draught-chains or traces very sloping.

UNITED DRAUGHT OF TEAMS.

Why will a span of horses travel with a load, with less fatigue, when they are hitched to a flexible whiffle-tree, than they will when the double whiffle-tree is strapped, or barred to the axle-tree? Because, when a span of horses is hitched to a flexible whiffle-tree, there is a principle of compensation, or, as it is commonly expressed, "some give and take," which is wholly lost or rendered inoperative by having the double-tree stationary. High-spirited horses, or oxen, or animals of any other kind, when they both draw by a double-tree, the ends of which are free to play back and forth, learn, very soon, to accommodate their movements to one another. If one starts suddenly forward of the other with his end of the double-tree, the one behind will soon learn that more than an equal proportion of the draught falls upon him; therefore he springs into it, until he fetches up even with his mate. But when they draw by a stiff double-tree, each one being hitched to his own single-tree, the entire load falls on one animal just as soon as the other slackens his pace; or if one start up suddenly, he must take the entire load with him. Whether two horses, when harnessed together, move with the same gait, or not, it is much better to have them hitched to a flexible double-tree, than to have it stiff or stationary.

When it is necessary to hitch to a stiff double-tree, by crossing the inside traces, as shown in figure 5, the

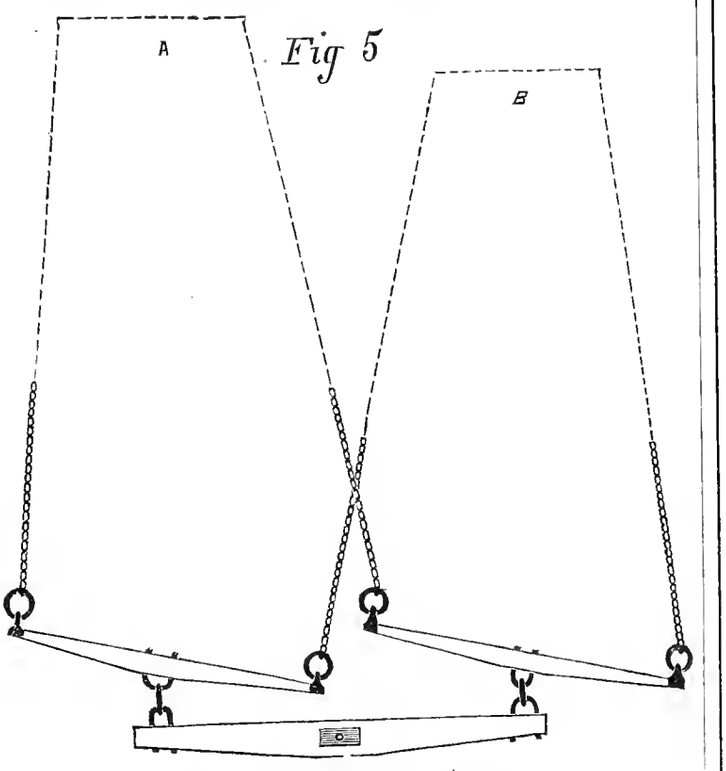


Fig 5

draught may be equalized, almost as well as if the double-tree were flexible. It will be perceived that, by hitching as in the figure, one horse can travel nearly one foot ahead of the other, and still the double-tree will remain in its proper position. When a span of horses is hitched in this manner, if one horse should move faster than the other, he draws from both ends of the double-tree; whereas, when a horse is harnessed by the side of a colt, for instance, and is not hitched in this way, the colt is liable to be jerked back rather unceremoniously, which is apt to vex him, and beget in him some bad habit.

HITCHING ABREAST AND TANDEM.

There is a vast amount of available force lost by hitching teams *tandem* (or *ad tandem*), unless some provision be made for hitching the forward team or horse lower than the breasts of those behind. In many instances, horses are harnessed tandem on our canals; but were they hitched *abreast*, whether there were two or three, they would perform the same labor with much less fatigue than they could when harnessed tandem. Three horses are often driven before a wagon, with one hitched forward of the two; but much of the force is lost by hitching the foremost horse in this

manner. It is always much more economical, so far as force is concerned, to hitch two, three or four horses abreast, than it is to hitch them tandem. Two horses, when abreast, will work with far more ease, when drawing a plow, harrow, or almost anything else, than they will when harnessed tandem. We sometimes plow with three horses abreast; but, as a general rule, those three horses will plow with less fatigue, if one be hitched to a rope extending to the plow, than they will to draw abreast, because, when they are abreast, the plow cannot be made to run as well as it will after two animals abreast.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

IX.

Leaving St. Joseph, I proceeded to Liberty, a pleasant, thriving town, situated four miles from the river. Here I found two carriage-shops, but they were not in want of hands. My best chance—so one of the bosses said—would be in Columbia, where they wanted body-makers. I suppose all jours, who have tramped in the West, have heard of Columbia, for, next to St. Louis, it has a reputation unexcelled in Missouri for carriage-making. I had often heard of the place, and, after learning that they wanted hands there, I determined to proceed thither as soon as possible. But how to get there? that was the question. Counting my funds, I found I had two dollars and eighteen cents left. The idea of walking the whole distance was horrid, as it was full one hundred and fifty miles. Revolving over the subject, I determined to proceed to the river, and then be governed by circumstances. Arriving at its landing, I sat down on a pile of boards to think over the matter. In a few moments I detected a skiff just above, containing two persons, who were pulling vigorously towards the shore. On reaching it, one of its occupants sprang out and fastened the boat to a stake, when, turning to his companion, he remarked, "There's a pile of flooring which looks as though there was going to be some building done somewhere, so I'll go up to the ware-houses and see about it." Coming up to me he spoke civilly, and asked if I knew whether there was any chance of getting work at carpentering in the neighborhood. Informing him that I was a stranger there, we soon learned each other's situation. He had come from Nebraska City, he said, with his brother, in their skiff, and they were going until they found a job at carpentering, even if it was down to New Orleans, and he closed by inviting me to share their skiff, and keep them company. "I expect we'll have to go down as far as Columbia," he added; "for I learn that it is the only place where we can hope to get a situation, and if so, we can keep together all the way there, and its rather lonesome traveling alone." Gladly accepting the invitation so cordially extended, I got in the skiff, and, pushing out in the channel, we proceeded rapidly down the river.

With our eastern friends, rowing out on the Hudson or Connecticut is pleasant recreation, but gliding down "Old Muddy," in a frail skiff, is quite a different affair. Of all rivers—and I have seen many—it is the crookedest and swiftest, deepest and muddiest, with its mad waters boiling in huge eddies at times, and then rushing wildly onward as though in a hurry to mingle with the pure current of the Mississippi. When the river is rising the whole surface of the water is covered with drift wood, from great sycamore and cottonwood trees down to single branches, while huge snags, or sawyers, are seen every few yards, sticking their rugged heads out of the water and swaying to and fro with the swift current. The tide runs, on an average, about six miles an hour, and by making a little effort with a pair of oars, the speed can be increased to ten. As one can readily imagine, it requires a skillful hand and a sharp eye to steer a skiff clear of all the snags, and sometimes it is difficult to tell where they are, as they disappear for several minutes, and then rise out of the water suddenly, like some huge monster of the deep.

"We have had rather a lonesome time thus far," the elder brother said to me, after we started, "but now I think it will be more pleasant. As we camped all alone each night along the bank in some secluded place, it reminded me of Robinson Crusoe and his man Friday, so I call my brother here Friday, while I personate Robinson."

After making eighty miles, we stopped at the mouth of a small creek to pass the night. Fastening the boat securely, the elder brother remained to build a fire, while Friday and myself went out to find some clear water for our coffee, and look for squirrels. We soon found a spring issuing from the bank, and after filling our bucket we clambered up the heavily-timbered bluff to look for game. Killing several young squirrels, we returned to the camp, where we found Robinson busy in setting his lines for fish. Cleaning our squirrels and cooking them, we made an excellent supper with coffee and bread, after which we smoked and conversed until bed-time. Driving stakes in the ground and covering them with branches, we formed a rude arbor, under which we spread a heavy oil-cloth wrapper, then, covering ourselves with blankets, we slept soundly until daylight.

The trip proved decidedly pleasant. My companions were good, jovial fellows, who had seen life and learned how to make the best of everything. We stopped at every town and looked for jobs, but none could be found. At the close of the third day we reached a small town called Rocheport, when we were informed that the next landing was the nearest point to Columbia, where they were building a good deal and carpenters were in demand. This news filled my companions with joy, and, getting in our skiff, we pushed out on the stream with the view of landing at the first convenient place for the night. The limestone bluffs on one side of the river rose up to the height of two hundred feet, while on the opposite side the low, level bottom extended some five miles away. We soon arrived at a place where a little stream came leaping down the rocky bluff, and, pulling in to the shore, fastened our skiff, and selected a place for our camping-ground, at the foot of an overhanging rock, crowned with great cedars far above us. Building a rousing fire just on the edge of the bank, we busied ourselves in getting supper, and as it was the last we expected to eat on our journey, we determined to do our best. Squirrels, fish, and frogs—the last a real delicacy—bread, cake, and pies, with a cup of excellent coffee, formed our repast, and we done it ample justice. After enjoying our pipes, we prepared our bed

close to the foot of the rock, when Robinson and Friday retired; but as I felt in no humor for sleeping, I refilled my pipe, and, sitting down by the fire, gave myself up to meditation. The waters of the great river sparkled in the star-light as they rushed past, while the waves, rippling over the rocks along the bank, sent up sweet music to my ears. All was still about us, but, far above, I could hear the wind whispering through the thick-leaved cedars, now clear and loud, then low and mournful as the sorrowful wail of heart-breaking anguish. By-and-by I heard a hoarse sound far down the river, and, as it approached nearer, I could distinguish the regular puffing of a steamer's escape pipes, and soon a turn in the river brought her in view with her red and blue signal-lights suspended from her tall, black chimneys. Slowly it worked its way against the swift current, and when nearly opposite, its loud, clear whistle echoed along the bluff, and in a moment it was answered from above, as another steamer appeared in view and swept by, with its long cabin brilliantly lighted, and the fires in the furnace blazing brightly, reflecting a red glare over the firemen, who appeared like demons in the uncertain light. Joining my companions, I was soon fast asleep; nor did I waken until the golden sunlight was tinting the cedars above us.

After an hour's journey we reached Providence, and, leaving our skiff in the hands of the ferryman, we proceeded towards Columbia. It was a hot June day; but as we had a plank-road to travel on, with woods lining it on either side, we managed to keep comfortably cool. About half way was a large spring, with its clear waters boiling up beneath the roots of an "ancient sycamore," and, as we were thirsty and weary, we concluded to halt for a short rest. Reclining on the green grass beneath the sycamore, we found a young man of twenty-five, or thereabouts, and as he is to occupy a prominent position in the remainder of our history, I will present him. Short and heavy set, with a smooth, full face; long, dark hair; full, large eyes, while a smile of perpetual good humor had indented itself about his mouth. It was one of those faces which we sometimes meet with, whereon nature has written the owner's character so plainly that the most blind can read it, and I read it thus: Good-natured, warm-hearted, original, and humorous, at home under any and all circumstances, with hope strongly developed, and one motto to nerve him onward—"Never give up." Saluting him, I commenced a conversation by inquiring if he lived in that neighborhood, and, on receiving an answer in the negative, I asked if he was traveling?

"Don't know what you might call it,—traveling or going to some place," he replied, dryly.

"Is that place Columbia?"

"Well, yes. I'm steering for there, but I'm pretty near out of *blubber*, and don't know whether I'll make the *riffle* or not."

"The reason why I'm so inquisitive," said I, "is, that we are going there, and we wanted to make some inquiries about business."

"Don't know much about it," said he. "I learn there's several carriage-shops there, and that's all that interests me."

Looking at him closely, I asked—

"Are you a carriage-maker?"

"I'm a painter, sir."

"And I'm a body-maker."

"Good!" he cried, seizing my hand with a warm grasp; "we're well met, as Shakspeare says, and we'll go in together. My only hope lies in Columbia, and if I don't get a job, there'll be but one place left for me—the poor-house; hope they've got a good one," and he laughed at the idea.

"Then you're about strapped, I should judge?"

"If steamboats were selling at fifteen cents apiece, I couldn't buy a share," he replied, in a manner so dry and comical that we all laughed heartily.

"Where do you hail from?" I asked.

"I used to live in Ohio," he answered, "but don't know just where I am from now; have been tramping up the river for two months, and I discovered some towns up there that aint down on the maps; came down on the last steamer, promising the captain that I'd pay my passage when I went up again, and I rather guess I will. If I don't get a job soon old Luby will be gone under sure, so let's push on."

Taking another drink, we all started off; Luby keeping us in a continual roar of laughter by his recital of adventures up the river. Halting on the outskirts of town, we washed the dust from our eyes and brushed up as well as we could, then, entering the place, we put up at the best hotel.

As it was some time yet ere supper, we concluded to look around a little; so Friday and Robinson went out to find a carpenter-shop, while Luby and myself proceeded to the nearest carriage-factory. A gruff old fellow was pointed out to us as the boss, and in answer to Luby's inquiries if he wanted a painter, he answered, curtly, "No, I don't hire everything that comes along," and, turning away, was about to leave, when Luby advanced towards him and said, "Look a'here, old fellow," and eyeing first the boss, and then his patent leathers, he continued, "when you say your prayers to-night just give thanks that I haven't got a pair of stogies on," and, turning away, we left for shop No. 2. The boss received us politely, listened attentively, "but really—ahem—times hard, money scarce—ahem—had work that ought to be finished, but—when—rather guessed he didn't want to hire just then." I hinted that times were improving and money was getting easy. "Can't tell much about it; got a good deal of work that ought to be finished—ahem—don't like to run any risk—guess I'll wait a month or so and see if times improve any." After talking in this way for some time without arriving at any definite conclusion, Luby, who thus far had said nothing, got up, and remarked, "Oh, well, it don't make much difference any way; I liked the looks of your town, and thought I wouldn't mind staying awhile, but if you don't want any hands we'll go down to St. Louis.

This remark caused the boss to move uneasily as he said, "May be we can make a bargain. What'll you work for? times tight, you know."

"I want work by the piece," answered Luby, as he turned away.

"As my work is already partly finished," returned the boss, "I couldn't give piece-work. What is the lowest you would work for by the week?" he asked of me.

"I shouldn't mind passing the summer here," I answered, "so I'll set in for fifteen dollars a week, if my friend here will agree to it."

"I don't care much about it," returned Luby, and he started off.

"Where are you stopping?"

"At the City," I answered, as we walked leisurely away.

"That's a sure job," said Luby, when we got out of hearing; "he wants us badly, but the old skin-flint don't want to pay us anything. He thinks we are about broke, but we'll learn him how to play the brag game. Depend on it, he won't let us leave town."

Luby proved correct in his conjectures, for directly after supper he called on us and offered twelve dollars a week if we'd go to work; and as that was as high as the other hands got, we concluded to try it for a few weeks.

Robinson and Friday were both equally successful, and we all felt happier that night than for a long time previous. Counting our funds, we had fifty-five cents all told, my portion being fifteen cents, which I invested in postage stamps.

Columbia is one of the prettiest inland towns in Missouri. The main streets are macadamized, and lined with beautiful shade trees, while the sidewalks are broad and neatly paved. The State University is located here,—a large, noble-looking building, with huge pillars in front, and surmounted with a lofty dome, from which one of the finest views imaginable is obtained. The town is surrounded with neat suburban villas, some modestly peeping out from among thick-leaved shade trees and well-trimmed evergreens, others rising up boldly with a majestic, palace-like appearance, yet all denoting good taste and liberal wealth in the proprietors.

Luby and I soon became sworn friends. After our day's work we would usually take a stroll out of town a mile or so, if pleasant, then, returning to our room, read and write letters, or lay plans for going South, where, as he often asserted, the-paradise of carriage-makers was located.

One evening, on going to the post-office, I received a letter, addressed in a beautiful hand, which I recognized as Thalia's, and, hastening to my room, I broke the seal and eagerly perused the contents. It was a pleasant, friendly letter, written in an easy, graceful style, expressing her pleasure in hearing from me, and telling how lonesome she had been since I left; then breaking off in a lively description of her garden, and the flowers that were blooming so prettily, one of which she inclosed—a half-blown rose of rare beauty—and then she would narrate a bit of news in a gossiping way, all of which I read very eagerly.

Was there ever a letter written by a lady to a friend that did not have a P. S. attached?" Some one has said there never was, which I will not dispute, for Thalia's was no exception to the rule. Way down at the bottom of the last page I read this: "P. S.—I almost forgot to tell you that Mr. Stiles returned from California a few days after you left us; and, don't you think! he was married last week to a young widow from Iowa. I must confess that I am real glad it is so, for—but perhaps you can guess why. When are you coming to visit us? Do come before all my flowers are gone; they are so pretty, I know you'll love to see them."

Seizing my pen, I wrote a long letter in reply, teeming with incidents of travel and heartfelt sentiments of esteem and friendship, not forgetting to copy those verses composed on the bluffs of the Upper Missouri.

How few, even among our educated young ladies, can write a good, readable letter. It is a very essential branch of education, yet few ever study it. Thalia, however, had not only studied the art of composition, but had practiced it also, and her letters, although written hurriedly and in the impulse of the moment, were nevertheless models of classical elegance. A good lady correspondent is a prize that cannot be too highly valued, so I kept on writing, although every letter from her only added more fuel to the burning altars of my heart. But the knowledge of Mr. Stiles' marriage and her avowed gratification of the fact, bid me hope of the future, and so I guided each letter-skiff down the smooth stream of friendship, now and then steering it close up to the flowery banks, where cupid lay sleeping beneath the golden water-lillies.

(*Concluded next month.*)

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

CHAPTER VI.

The physician arrived, and, after a partial examination, ordered the body to be carried to his office, a few paces distant. We remained outside to await the result, and were soon joined by Bright and several of our shopmates, all eager to learn the particulars. Bright and young Gay shook hands as old acquaintances, and from their conversation I learned that the latter had returned from college that morning to spend the holidays at home; from a young friend of his, who had been present at the party, he had heard a somewhat highly-colored account of the affair, and, arming himself, he had sought Horn and *found* him, as has been seen. As I listened to that boy, I thought over all the precocious specimens of "Young America" I had ever seen or heard of, and set him down as the most perfect, according to the popular conception of that far-famed youngster. He talked and looked the man; his words were well chosen and grammatically arranged; he evinced no embarrassment, though the circumstances under which he was placed would have tried the nerves of an experienced desperado. If he felt any anxiety as to the result of the surgical examination going on in the office, it was not visible on his face; and when questioned by friends as to the rencounter, he answered as coolly as if it were an affair of ordinary importance; nor was there a shadow of levity or boastfulness in ought he said. He presented, at least to me, a new phase of premature ripeness of character that I scarce knew whether to admire or deprecate. On the one hand, I hated that murderous code of honor that resorts to the pistol in all cases when wrongs are to be redressed, and, on the other, I shudderingly admired the cool courage of that mere stripling who dared to adopt it, for, be it remembered, the arbitrament of the pistol once recognized and adopted, he must be a bold man indeed who dare refuse an appeal to arms, even on the slightest provocation.

Mr. Bright gained admittance to the office, and in a few minutes returned to report that the wound was not likely to prove fatal; the ball was extracted, and in a short time they would remove him to his boarding-house. Young Gay departed to surrender himself to a justice of the peace, and Mr. Bright accompanied him to go his surety if necessary. The magistrate considered the matter very gravely for about ten minutes, and then, imposing a

fine of ten dollars for a breach of the peace, dismissed the case. This fact may smack of fiction to some minds, but it is *true* nevertheless, and I can point to dozens of parallel cases in different localities.

The interval between Christmas and New Year's Day is the negroes' play-time, during which they are their own masters as far as work is concerned, and, by the whites, the time is very generally devoted to rest and recreation, or in posting books and squaring accounts. Henry Burnet and I honored the custom of the country in refraining from work during the week, and we spent the time very agreeably in rambling about the country and making calls on the many acquaintances we had made at the party and elsewhere. Of course, we did not neglect to visit the sprightly Maggie Gay, and our reception by herself and family was all that we could desire. Her mother, a fine, well-preserved matron of forty-five, was as lively and interesting as the daughter, and "Bob" appeared to us under more favorable colors, a courteous, intelligent student, ambitious of some day figuring before the bar, or in the legislative halls of Alabama. Mrs. Gay was a widow, and had been so for ten years, but her husband had left a fine property, and they were in easy, if not affluent, circumstances. Maggie, who was eighteen, had many suitors, and it was said the witch smiled on all alike—that she was heartless, and a confirmed flirt. Flirt she might have been, but it was only because she couldn't well help it,—men *would* pay "attentions" to her, and she hadn't the heart to rebuff them in a summary manner; but, that she was heartless, no one could look into the depths of her soul-full eyes and believe. The truth was, Maggie was handsome, beautiful, good, and what woman possessing those attractive attributes but has enemies of her own sex who are ready to cry flirt, or even worse?

Our employee had written to Mobile and Montgomery for a hand to take the place of Horn, or, in other words, to build common "solid-side" work; and a person named Skinner, from the former city, got the job. This man was in all points the very antipodes of his predecessor, and his round, rubicund, cheerful countenance was a ready passport to the favor of all hands. In stature, he was short; of heavy, muscular frame; his age about forty; and, judging from the primness of his dress and manner, a bachelor; though there was no appearance of that sourness of disposition popularly believed to belong to that class of humanity. Certain peculiarities of pronunciation proved him a southron by birth, and we afterwards learned that he was a native of Alabama, and learned his trade in Mobile. Although a man of no education, he was an inveterate talker, and very humorous withal; indeed, the grotesque dialect that he used was, in itself, provocative of mirth.

The holidays passed away and we went to work again. Skinner was a good workman, but slow; he seldom seemed in a hurry, and devoted an hour or two each day in plaguing Sam, the darkey, whom he managed to keep in a constant state of perturbation. One of the duties of Sam was to wash off old work that came to the shop to be repainted; this he had to do in the yard; and, when the weather was cold, it was his custom to warm the water a little on the stove in the wood-shop. Bright ordered him one morning to clean off three or four old jobs, and, as the air was rather keen out of doors, the darkey determined to take "de chill of de wata fust," and for that purpose he filled a boiler with water and set it on the stove; then he got a large "slack-tub" from the smith-shop and brought it in, intending to fill it, temper it from the boiler, and use it as he needed it. He had to carry the water some two hundred yards in buckets, and it was rather a cold job, so, every time he came in he would sit down by the fire and warm his fingers. The seat he used was a piece of poplar board laid across the aforesaid tub; and when that vessel was about two thirds full, Skinner, in the absence of Sam, and unobserved by us, took the strip of board, and, sawing it nearly in two, laid it back just as he found it. Sam came in, emptied his buckets, and, remarking that it was "missible cold," sat down. There was a sharp crack, a splash, and a yell that drew all eyes in the direction of the stove, and there we saw the head and heels of the darkey just above the edge of the tub, working frantically in an abortive attempt to get out. The outburst of laughter that resounded through the shop must have been heard over half the town. Bright came tearing in from the office as if the shop had been in flames; and Sam, seeing the "boss," made a desperate lunge to extricate himself, and upset the tub! He bounced to his feet as thoroughly soaked as if he had been ten feet under water, and dripping like a spaniel from head to heel. Skinner gave vent to his mirth in long, reverberating peals, that proved too much for his strength, so he sat down on the floor, where he could yell without danger. Bright held on to the door and shook and screamed. Many foot-falls were heard rushing down stairs, and in a very short space of time "all hands" were in the wood-shop; the tub, the water on the floor, and the streaming garments of Sam, told the tale, and such continued shouts of laughter were never heard outside of bedlam. In the midst of all stood the bewildered darkey, looking from one face to another and sometimes at the tub; his eyes hung out on his sable cheeks in wild astonishment, his teeth shattered audibly, and ever and anon he would draw his coat-sleeves through his fingers to force out the water. The whole matter seemed a mystery to him, and his look of blank surprise, not unmixed with terror, was irresistibly funny.

The uproar at last subsided, and the poor fellow went home to change his garments. Skinner was tickled half to death, and did little else but laugh all day; nor was he without company, for every few minutes a hearty guffaw! would burst forth from some quarter of the shop.

"I 'clar to goodness," said Skinner an hour or two afterwards, "I thought I'd kerflumix sartan when I seed that thar niggar a kickin an splurging like onto a sick allagator in that ar tub, ha! ha! ha! aw! er-r! ho! ho-o-o! aint I never a gawin ter qui-it, ho! ho! oh! Wall, I never seed the beat! You fellars has all got done larfin, but if yer ony knowd what I wor a thinkin 'bout you'd hollar for a week, wall yer would—ha! ha! aw! ho! ho! aw! ha!—but I'll tell yer all 'bout it, if I kin ony keep my face straight long ennuff."

"Wall, nigh onto twenty year ago I wor a workin in Mobile, an I boarded with a widder woman named Wilkins. She had lots o' boarders, an a fust-rate lot o' fellars they wor—mostly mikannics, an sich. The widder had a dorter called Georgiannar, a stavin nice gal, an *sich* a singer! ugh! Jenny Lin wor no whar! Soon's I seed Georgy I know'd I wor a goner, but I wor so everlastin bashfull an skeery like, that I dussant open my head to hur. I wor a young chap in them days, an not so doggon fat an ugly as I is now—'deed I wasn't, so yer needn't

grin! I made 'mazen big wages an dress'd right purt, 'sides carryin a gold watch wuth a pile o' money, an I allus went to theatres, shows, balls, an other kick-ups, an put on a right smart sight o' style generally, fur a workin man; so, I 'sidered that Jim Skinner wor as good as Georgy Wilkins, an I spunked up one day an axed her to go to a ball, an she said she would, an I wor the happiest fellar in Mobile. It wor at dinner time that I axed hur, an when I sot down ter eat I felt so 'stonishin queer I didn't know what I wor a doin. She sot at table an looked so uncommon sweet that I thought it wor a sin ter open my mouth afore her; 'deed, it seemed right down 'diculous ter eat in hur presence. A black fellar axed me to take some beans, but I said nary bean, an I 'clar to goodness I eat nuthin ony four pieces o' pie with 'lasses on't. Wall, we went to the ball, an arter that we got 'long fust-rate, fur it made me sorter brave like, an I could speak to her 'thout feelin shivery and skeery. Afore long she got so she used ter ax me into the parlor o' nights, whar we sot an talked, an larfed, an sung, an, arter awhile, courted, yes, an kissed too, 'tho' she wor 'mazin shy at fust, an hit me a awfull diff on the y'ear. Things went on smooth as kin be fur a right smart period o' time, an we had everything fixed fur gittin hitched up; the widder had said yes, an the day wor sot—but thar wor a breeze ahead. One mornin thar wor a new chap come thar ter board; he wor a clerk, or somethin o' that sort, an talked 'stonishin nice, an wor horrid polite. He had smell-good on his har, ruffles on his shurt, an wore a forty-dollar coat every day, 'sides heaps o' jewelry an other flub-dubs; 'deed, he wor too nice ter touch, an smelt powerful. Now, don't you think! this fellar took to payin 'tentions to Georgy the very fust day he wor thar! Mabbie it wor ony his way an he didn't mean nothin, but 'tanny rate I wor rilled 'siderable an felt wolfish, 'specially when I seed that Georgy liked it and talked back in the same come-overish kind o' style. Next day it wor the same, ony wuss, an it kep on gittin wusser, an the boys seed it, an poked fun at me, which made me madder'n a lunytick!

"Awhile afore that, some o' the boarders wor a foolin an cuttin up in the sittin-room an broke two o' the legs off'n a cheer. The widder didn't know nothin 'bout it at the time, so the boys stuck it together an sot it in a corner. Thar wor some company at the house—mostly wimmen folks—that the widder had axed in ter tea, an some o' the niggars come inter the sittin-room arter extra cheers fur the company. That sot me ter thinking 'bout the broken cheer, an then I thunk of the doggon clerk an how nice I could trap him with it; so up I jumps an takes it, an, wen the winches wot sot the table wor out in the kitchen, I put it in his place, an scooted back again 'thout anybody a seein me; 't least I tho't so. By an by the bell rung, an we all went in to grub. I sot down an watched, an when the fellar marched inter the room my hart wor in my mouth; he wor jest a goin to squat inter it, when Georgy come up an axed him if he wouldn't please to take the next cheer an give hur that one, so she could be next hur friend, Miss Simson, who wor one o' the company. I tried to hollar, but my tongue wor stiffer'n a poker, an wouldn't wag; I felt pale an wanted ter faint, but couldn't; then I happened ter think that she ony wanted ter sit side o' him an say sweet things, so I 'cluded to let her slide, an pitched inter the supper, tho' I kep my eye on hur mighty close. Wall, she fixed hur dress an sot down, an a waiter handed hur a cup o' tea, when, cur-ic! went the cheer, an down she went ker-smash! Up went the hot tea an cum down on the clerk; he yell'd wussen a wild injun, every last woman yelled wussen him, an Georgy beat the hull lot, fur she screeched like forty wild cats. I 'clar to mighty! I never cum so near choakin in all my born days, for my mouth were full o' grub; but it didn't stay thar long; somethin gave way, an it flew out clar across the room, an then I larfed fit ter bust my head open, an all the boys snickered like mad. The widder didn't like it, an spunked up, an said we orter have more manners. Then I tried ter shut up, but it would'nt stay shut, an oney cum out louder'n ever; so, I got up an larfed out o' the room, an clar out ter the front door. It didn't stop yet; so I sot down on the door-step an larfed; then the widder she cum out an called me a brute, an told me to clar out from hur door, so I larfed off up street, an folks looked at me an tho't I wor crazy, but it ony made me larf more to see them stare. I didn't go back ter the house that night, an next mornin one o' the widder's niggars brung me a note from hur, sayin that she didn't want nobody 'bout hur house that would play sich missible tricks, an I might send an get my things, fur she didn't want ter see my face again. It 'peared that one o' the niggars wot waited on the table seed me bring in the cheer, so the thing was diskivered an I wor done for. Wall, when I seed Sam drap inter that ar tub, I thought of Georgy an the cheer, an both o' them like ter killed me."

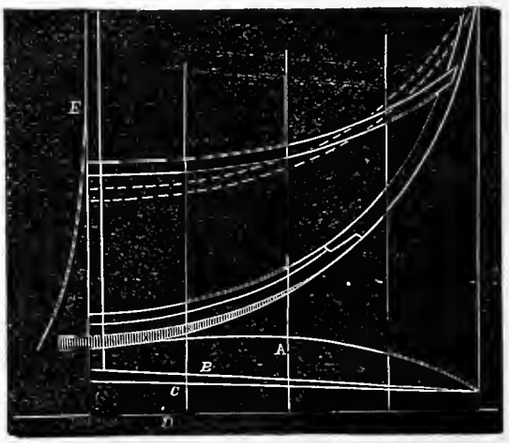
(*Concluded next month.*)

For the New York Coach-maker's Magazine.

ARM-RAILS WORKED OUT BY THE SQUARE RULE.

BY A. DUXBURY.

I submit the rule named at the head of this article—to work out an arm-rail by the square rule—for the instruction of apprentices at body-making.



In the first place, get the face-line of the arm by measuring how much the standing pillar "cants under," from the line *E*, at the point where the arm is let into the standing pillar. We will suppose this to be one-half inch, and the arm is required to be one and a quarter inches. Next, mark off one and a quarter inches from line *A* at line *E*, and mark the thickness the arm is required at the back end, and then mark from one measure-

ment to the other, and you have the line *B*. I have placed the dotted arm-rail so that a young beginner may understand that it requires the line *C* for its face line, which is ascertained in the same manner as the line *B*.

You will observe that the front arms are to be worked out in the same way as the back arms. You will also perceive that when the arm-rails are in their proper position in the body, they will stand, in relation to the bottom side, as line *B* or *C* does to line *D*, which is the face of the bottom side, and of course the arms will be very much contracting; therefore, you must shave them out by the contracting line *B*, or *C*, if it is the dotted arm-rails. The next thing is to place the arm on the draft-board in the right position, which you can do by placing a block of wood under the end of the arm at the line *E*, until the contracting line on the edge of the arm is square with the draft-board. You will next mark off the shoulder on the arm with a try-square from the draft, at the inside of the standing-pillar [illegible] the lines you wish to "prick-off." [illegible] top and bot-

KITTIE

Dear Jennie:—W[illegible]
sweet retreat, bright, chee[r]
from the trees, and told of [s]
Now, still September scatters sere [l]
at evening the low winds sing dirges fo[r]

We have been very busy here at L[ittle]
last you heard from "Kittie Leigh." I assu[re]
no small task to prepare for a wedding. I will [not]
tempt to number the times we have been in town, b[ut]
think "Prince" must know the way now, if never be-
fore. Then there has been the canning, preserving, and drying of fruit; the making jam and jelly, and all this beside "the sewing;" really, it has almost, *but not quite*, discouraged me from ever trying.

"*Who waited for me in the parlor when I closed my last letter?*"

Why, now, how inquisitive you are. However, here it is:

Mr. Walter Cameron had called to ask me out for a ride. The afternoon was delightful, and, of course, the kind invitation was accepted.

Mr. Cameron is passionately fond of poetry, though he never writes it. You should hear him repeat from Scott and Burns. I think the Scotch accent adds much to the beauty of these, in particular.

We found Lizzie watching for us when we returned. "Tea is all ready," she said gayly, as she took my hat and raglan, "all ready now, in short order," and I heard her humming "Annie Laurie" as she tripped through the hall.

Frank had *happened* in during our absence, and so remained the evening. We were quite surprised, when Walter Cameron rose to leave, to hear that next morning he should start for the West, whither business had called him, and where he should be detained several weeks.

"Can you not give me something as a parting gift, Miss Kittie?" he said, coming to the window where I stood.

Frank and Lizzie walked down the garden path together, and I heard them chatting gayly at the gate.

"Will you accept a knot of these rural flowers?" I read, "and will you remember the inmates of Elm-Farm till they fade?"—and I bound the bouquet I had tied with tendrils of the sweet pea vine,—its language, "just you go." "Many, many thanks, Miss Kittie; the remembrance of these flowers will live when their bloom has departed; so it is with the memory of pleasant hours. Will you, in turn, will you accept this token of friendship, and sometimes remember the absent?" And ere I had time to accept; or even thank him for the tiny gold locket he had attached to my chain, he took my hand, murmured "good-by," and was gone. I sprung the golden clasp, and looked at the miniature. It was perfect, and yet there is something in the expression of Walter Cameron's countenance which art cannot reach. You have seen such faces, Jennie.

"Ah, my fair cousin, did he leave the ring on your finger? Sure, you did not tell him it would never fit? I know you wouldn't do that, Kittie Leigh?" and Lizzie took my hand in hers, then seeing my finger "wore not the glittering band," she added, more thoughtfully, "forgive me if I spoke too rudely,—I only *thought*,—he stayed so long."

Showing Lizzie the miniature, I told her all we had said.

"You were mistaken, cousin Lizzie. Mr. Cameron regards me as a friend,—*nothing more*."

"O, it is all plain now," she said, archly; "Walter wishes to know the ring would *surely fit* before he offers it. Mrs. Mason may thank Kittie for her brother's long visit; and, Kittie, is it true that I may thank Walter for yours?"

"Tell us something of your younger days, grandmother, and your first acquaintance with grandfather," so Lizzie and I said to her as we sat sewing in the neat sitting-room. There came a pleased expression over the

dear old lady's face as she drew her rocking-chair nearer the window where we sat and said: "I don't know, girls, as there's much in my story that young folks now-a-days would call romantic, but, such as it is, you're welcome to it. My father died when I was a baby, so I don't remember him. The first that I do remember was living over here where the parsonage stands now; it belonged to Deacon Osburn then (that's Sary's grandfather); he afterwards gave the lot to the 'society.' I was just about sixteen when young Mr. Clayton came from the East, and bought the Elm Farm, and hired men to build a new house on it. I can tell you, a young man who had been brought up among refined folks, and had nice, polite ways, wasn't seen every day, and it caused a good deal of talk. Young Mr. Clayton heard that my mother took in boarders sometimes, so he came over and made arrangements to stay with us until the house was finished. 'Then,' he said, 'I shall go East again, and when I return I shall bring a pretty girl to preside at Elm Farm, whose name will *then* be Mrs. Clayton.' We were sitting at the supper table when he spoke, and I remember how his face changed color. Well, the house was done at last, and every one thought it splendid. The room w sit in now was then the parlor, but things have been good deal changed round since. The first time I sa young Mrs. Clayton was at church; the next time, s called with her husband at our house, and asked me come in and sit with her often, she was so lonesome. the winter wore on we got more and more acquaint she lent me books to read, and taught me to embroi I thought there never was another so good, and so h some, too. It was early in October when little 'May' came to live at Elm Farm. O, how I lovec wee thing. I had full care of her till she was two m old; and then they started for home, as they always the place down East where they came from. How some the morning seemed when they left. 'May w quite a girl when you see her again, Kate; be sure to a welcome ready when we come in the spring,' Clayton said, as she kissed me, and said 'good- Dear lady, she little thought then"—and grandmo drew her 'kerchief across her eyes. "It was past middle of December when my mother took sick, a Christmas-day she died. Those were dark times for me but Deacon Osburn's folks were very kind, and took me to live with them, and help in the kitchen. Some how I kept looking forward to the time when the Claytons would come back in the spring; but when the time did come it was only he who came, and when we asked after his wife he told us the sad story of her death. He let out the farm to one of the deacon's sons, and said he should travel for a year or so. He only stayed a few hours, and seemed very sad. That was the last we saw of him for more than a year; and then, when he came back and brought a housekeeper and a servant-girl to take care of little May, it caused about as much talk i the neighborhood as ever there was before. I remeinb what an interest all the girls 'round took for the litt child,—Hannah Osburn, the deacon's daughter, in par ticular. Well, the handsome young widower used to come over to the deacon's pretty often evenings, but I never used to see much of him. Hannah would tell me what he said, after he was gone. So the fall and winter wore away. The last week in April Hannah went to spend with her aunt in the village, so Sunday afternoon I went to meeting alone. You may judge how surprised I was, after meeting was out, to have Mr. Clayton come up to where I stood talking with some of the girls, and ask, as polite as you please, if he might see me home. I suppose I *was* wicked, but I did feel a mite proud as I walked with him from the house, for I knew there was many a girl there who would be glad to stand in my shoes just then. I was bashful, so he did most of the talking. 'I've called at the deacon's to see you a good many times,' he said, or something like that, 'but you have always seemed to keep out of sight. I know you were a friend to my dear dead Mary, and that you are alone in the world.' And then the rest of what he said, as we sat in the deacon's spare room that evening, I suppose both you girls know, or something pretty near like it," and grandmother smiled as she looked at us over her glasses. "When I told Hannah about it, she said, 'Why, Kate, do you suppose the rich, handsome Ben Clayton would think of marrying you?' wrong to trifle so.' However, the ed,

a-
in-
hair.
dsome
ear her
g husband
appy. Next
shley Hall.
else to tell you.
as Walter Cameron
elm trees together, he
ed her a question, and her
o with you, Walter."
going with him to his Highland
blue sea. Keep the secret safely
week I start home. Adieu! Ever your
ll the flowers of May are blooming, your
KITTIE LEIGH.

THE RED, WHITE, AND BLUE.—The *red* cheeks, the *white* teeth, and *blue* eyes of a lovely girl, are as good a flag as a young soldier in the battle of life need fight for.

Pen Illustrations of the Drafts.

THE OSTEND SOCIABLE.

Illustrated on Plates XXXVI. and XXXVII.

We see no reason why this style of carriage is not more fashionable among us, from the fact that it is much safer, in the case where a horse takes fright and runs away with the carriage, than in ordinary vehicles. Inside passengers could, in such circumstances, open the door and spring out without much danger to life or limb. In getting in and out of these carriages, a lady has no filthy, muddy wheel to encounter; and they will seat double the number of passengers that an ordinary Rockaway will; and the facilities for "cramping" are equal to almost any carriage. On Plate XXXVII. is shown the back view of this sociable. The front has the same appearance as the back, except in the space required for the door. The boot is framed out, which makes a very light appearance, being very narrow. There might be sliding-frames put in the side windows and drop-frames in the front and back ends. A swell is required to the front and back of the body, the same as in the sides of a coach-body.

LANE'S ROCKAWAY.

Illustrated on Plate XXXVIII.

For this draft we are under obligations to our friend, Mr. D. M. Lane, of West Philadelphia, Pa. The formation of the body is very peculiar, and different from anything in the line of Rockaways that has come under our notice. It makes a very light-looking carriage, and is very creditable to the ingenuity of the manufacturer. We trust to be favored with other original drawings from the worthy gentleman.

CLIPPER BUGGY.

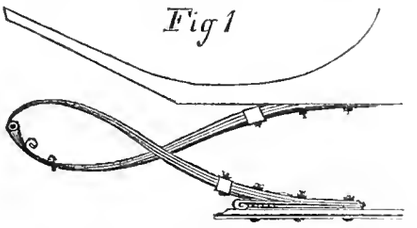
Illustrated on Plate XXXIX.

We may call this the *ne plus ultra* of buggies, and decidedly a New York "institution," and creditable to our friends, Messrs. Brewster & Co., the original designers and manufacturers. The draft is by one of our special artists, Mr. I. W. Britton. Very little need be said in explanation, since the draft will "speak for itself." The seat is a round-cornered one, and the boot a panel, neatly and finely painted.

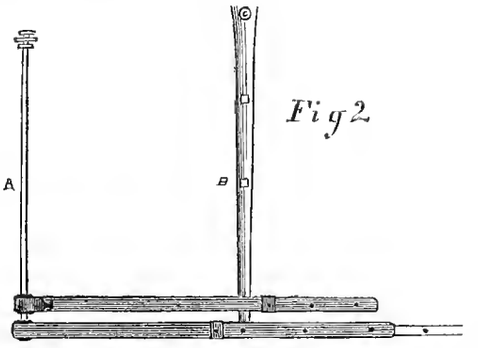
Sparks from the Anvil.

SHEAR-SPRINGS.

These springs, of which we give a side view in Fig. 1, are applied to carriages in cases where C-springs could not be employed for want of room, between the body of the carriage and the fore-carriage, although they play on the same principle. The lower half, which is placed on the outside of the upper half of this spring, sets on the perch



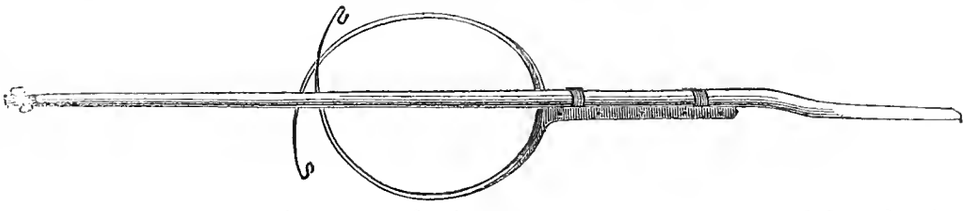
(the perches are doubled), and the two springs are connected together by an iron rod, as seen in the bird's-eye



view at A, Fig. 2. A strap should extend across from the two upper halves, to steady them, as shown at B.

POLE-STEADIER.

There is much inconvenience found in the use of poles to two-horse carriages, from unsteady and vibratory motion, when passing over bad roads. This inconven-



ience may be in a great m easure corrected by adopting an arrangement such as is here presented to the reader. It will be observed that we have attached two circular iron branches to the pole by two rings. These two irons are riveted firmly together at the shanks, while at the other end hooks are formed, to which the belly-bands of the harness should be secured. These irons are so arranged as to play *beneath* the pole.

In a future number of this Magazine we intend to give another idea, answering for the same purpose—the pole suspended from the collar of the horse.

AMERICAN COAL.

There is no better test of the advancement of our country in manufactures and commerce than the quantity of coals which are annually raised from our mines. Judging by this standard, the coal product of our mines for 1860 affords us a most cheering and delightful evidence of the great progress our country has made since 1850. In that year the anthracite coal product was 3,321,126 tons, while in 1860 it was no less than 8,131,234 tons; thus show-

ing that the quantity has been more than doubled in ten years, by 1,488,962 tons. By late statistics we learn that the annual coal product of England is about 60,000,000 tons—an immense quantity; but we are rapidly marching up to this measure, as in 1820 there were only 305 tons of anthracite raised in all the United States. In addition to the above quantity of anthracite, there were probably also as many as 4,000,000 tons of bituminous and cannel coals raised from our mines last year. We have not been able to obtain statistics of these, and so far as we have inquired there are no reliable means of getting accurate statistics; but when we reflect how much bituminous coal must be consumed in such an iron-manufacturing city as Pittsburg, Pa., and that this fuel is now very generally employed on the Ohio and Mississippi steamboats and in some of our western cities, the quantity must be very large. And when we also take into consideration the great quantities of cannel coal which must be mined for making oil and gas for cities, we are perhaps warranted in fixing the annual coal product of the United States for 1860 at about 12,000,000 tons. Success to the coal trade! Our best jewels are our "black diamonds."—*Scientific American.*

Paint Room.

For the New York Coach-maker's Magazine.

LESSONS IN PRACTICAL COACH-PAINTING.

BY F. W. BACON.

LESSON III.—Painting the Body.

It is presumed that the body has been primed, according to our instructions, given on page 173, for priming the Carriage-part. After the priming has become hard, rub it down well, with No. 1 sand-paper, in order to cut off all the grain of the wood that may have raised; then putty it up and apply two or three coats of leading, as may be deemed necessary, mixed according to previous instructions. Be sure and give each coat time to harden. It is now ready for the "filling," or "rough-stuff." In putting on the rough coats, it is a very good plan to "cross coat," that is, cross each alternate coat in laying on. This is especially necessary when the body contains large panels or plain surfaces. There can be nothing definite in regard to the number of rough-coats that a body should have; it depends entirely upon the quality of the work the wood-workman turns off. I can make a better job with a coat of priming and two coats of coloring on some carriages, than I can upon others by putting on a dozen coats of lead and filling. Here is the way I make my "rough-stuff," and *I know* that it will not crack or peel:

Take one part of white lead, two parts of red lead, and four parts of yellow ocher. Mix it with one part of *good* Japan, four parts of boiled oil, and six or seven parts of turpentine.

This may be ground or not, at the option of the painter. I consider however that if roughing is ground, it saves more than the time consumed in rubbing down the roughing. So, if the painter prefers grinding paint to rubbing bodies, let him "pitch in."

After the body is rough-coated, it should be allowed to stand at least a week or two in order to harden. When it is sufficiently hard, take a piece of block pumice-stone, and plenty of water, to rub it down with; keep the body very wet, and it will work the better. For mouldings, corners, &c., pieces of stone should be filed to fix exactly. The best quality of pumice-stone is the lightest and most porous. The "scratchers" contain small, black specks, which if discerned should be removed. If you cannot discover any of these in a scratcher, the best remedy is to go out into the open air, shut your eyes, and throw it with all your force.

When the body is rubbed down, washed and dried, rub it thoroughly with clean moss or curled hair. There will be some corners, in spite of all washing, that will retain more or less stone and paint. This may all be effectually removed with a dry, stiff brush. When the body is as clean and dry as it can be made (and not before), it is ready for the coloring. Coloring should be ground very fine, in equal parts of boiled oil and turpentine, with japan sufficient to dry it in about twelve hours. Before using it should be thinned to the proper consistency with turpentine. When dry, rub it well with moss. Each coat must be mixed, applied, and rubbed in the same manner. It will require three coats of ordinary coloring to cover a body as it should be. If all this has been followed "to the letter," your body is a "good job," so far, and is now ready for varnishing. The first coat of varnish must not be applied too thick, and when quite hard should be rubbed with pulverized pumice-stone and water. This forms the ground for fine lining and ornamenting. We intend to speak more definitely upon the subject of varnishing hereafter.

REMARKS.

It is well known among the painting "craft" that it is almost impossible to find two painters who prepare their work alike and employ the same means and manipulations. In view of this fact, I here solicit argument from any of the "brother chips" who may see fit to enter the lists, and for the same reason I shall presume to offer some remarks on the course taken by some others of *the profession.*

We find those who use varnish in their roughing. This I consider a bad practice, because it is not always that good varnish is used for that purpose, and, furthermore, it is not safe to depend too much upon the quality of the varnish used; if good varnish is not used in the color it will *certainly* crack; the work is just as good without it,—why then run a useless risk by putting it in? The same logic will apply to the folly of putting varnish into the last coat of coloring. Another equally absurd practice is that of leading a body after it is roughed and "cut down." When the body is as smooth as pumice-stone will make it, it is useless, if no worse, to lead it again. In cutting down my roughing (as given above), it is not required to rub it through and through; all that is needed is to work until a plain, even surface is obtained. The roughing so prepared *will stand as well as any paint that can be used.*

I have given what I consider the best proportion of oil in mixing paint, but more or *less* can be used by observing a proper degree of caution. The same kind of paint should be used throughout. Do not put on a coat or two of all turpentine and japan, and then follow with a coat of oil; avoid putting turpentine over oil and oil over turpentine, for it will surely crack, or peel off. I wish it to be understood that I am not writing suggestions for others to

experiment upon, but simply offering the result of my own practice and experience.

RECIPE FOR MAKING SUPERIOR JAPAN.

Take two pounds litharge, two pounds red-lead, half a pound of umber, one half pound sugar-of-lead, and two gallons of linseed oil (raw); boil these together till they are dissolved, and, before it is quite cool, add three gallons of turpentine.

For the New York Coach-maker's Magazine.

DOWN ON THE JEW VARNISH-PEDDLERS.

Mr. Editor: *Dear Sir*,—I wish to say a few words to our mechanics on a matter connected with trade, which not only concerns them, but others in the community beside. I have chosen your Magazine as the medium of publication, because it seems to be a high-toned periodical, interested and busy in advancing the true interests of trade in both ways, as they concern not only producing-mechanics, but their customers, the consumers, also. This is as it should be, if you will allow me to say so; and it does one's heart good to find able men who are willing to devote their energies to spreading the wholesome truth, that the good of the producer and the consumer may be, in the long run, advanced by the same means. Will you, then, allow me the necessary space in your pages, to say something about a pernicious, unhealthy, and troublesome development of trade, that seems to be gaining ground very rapidly in our country now-a-days? From what I know of other men's business, I find the same trouble reaches them in their branches of trade that has touched us in ours, and led me to throw aside my pencils, pots, pallets, and brushes, to talk with you and your readers about our grievances, and propose some plans to lessen them, if I can.

The particular trouble I wish to write about at this time is the underhand, dishonest and *illegal* practices of *some* of the dealers in varnishes, japans, &c., &c., materials which we must use in our trade. I have heard of similar troubles in other branches of business, but I speak only of dealers in these articles, because they most nearly affect me in this matter, and because I feel confident that others who have to do with carriage-making must have suffered by the rascally tricks of these fellows. Indeed, I *know some have suffered*, and think many more must, if these practices continue.

It has been the habit of the agents of some houses, dealing in the articles above-named, to go about the country soliciting orders. This is all right, and perhaps might be made conducive to the convenience of customers; but the agents, or the principals, of some of these houses—one or the other of them—have not been content to take orders as they have got them, and fill them as they were given, but have added a large percentage to the amounts ordered, some times nearly one hundred per cent., even; and when they have thus forced a larger amount of goods on the purchaser than he has ordered, they wheedle or bully him, in bad English, into payment of their bill, by threats or cajoling.

Perhaps all your readers may not have suffered by these men, and therefore may not fully understand what I complain of. I will, therefore, give a sample of these traders' practices.

Jones orders a barrel of varnish, we will suppose, of one of these fellows, an agent of the house of Buncombe & Sharpe, of Gougetown. It may be that Jones is not in immediate want of the article, but is, after some talk with the agent, induced to order a barrel of coach-varnish. He will want it soon, and the agent argues that it is a good time to buy now; the article offered is a superior one, and, at all events, there can be no harm in Jones' buying a few weeks earlier than he intended to. It may be that Jones gives the order, knowing that he shall want the goods soon, in order to get rid of the agent's pertinacity. In due time the barrel arrives, and Jones finds, to his surprise, that *it is such a barrel as he never saw before;* and, instead of containing the ordinary number of gallons, it contains, and the bill demands payment for, forty or fifty gallons. Jones is in trouble; he don't want all this varnish; he never ordered it; he cannot pay for it readily; but Messrs. Buncombe & Sharpe talk so glibly about law, and his ordering a barrel, and that he has got the goods, and must pay for them, &c., &c., that, at last, poor, good-natured Jones—rather than have trouble with the enterprising and unscrupulous firm of Buncombe & Sharpe—pays for the full amount of goods sent, and finds himself with twice as much varnish on hand as he needs, and his pocket wanting in dollars that he might use to advantage in other ways.

Mr. Editor, in the view of any honorable man this proceeding will be set down as outrageous. And it is so, yet it is only a fair statement of what has been done, and of what men are around among our mechanics and consumers trying to do now; and it is in the hope that a word or two may set buyers to thinking, and may enable them to avoid the trap some have fallen into, or to escape from it if already caught, that I have written this article. There are within reach letters from just such buncombe and sharp dealers as are here described, in answer to remonstrances from purchasers, in which dire threats are set forth unless payment is made, and other letters more quiet in their language, in cases where the purchaser has remained unterrified, and has insisted on returning goods that have been sent not according to order or custom.

It is true that such practices will very soon disgust any purchaser who buys of such tricky dealers, and that, when once bitten, the injured party will be generally careful to keep clear of the man or firm that he cannot trust, and that in this way these practices will at least destroy the business of those who employ them; but yet these men can do, and will do, a great deal of harm before they have run to the full length that opportunity will give them. Take the one article of varnishes that I have mentioned. If an agent can manage to force on an individual purchaser twenty, thirty, or forty gallons, or upon a manufacturing firm or corporation a barrel or two more than is needed or is ordered, and can collect, by bullying or any other way, the pay for it, he can manage by pertinacity and glibness of tongue to find a great many victims in the course of a year, and his gains for his principles will, in the end, amount to a high figure. The business will finally run out, it is true; but those men are not seeking a lasting, honorable position in trade circles; they are sharpers, and seek only large, immediate gains, and when they have run one matter into the ground, you will find them trying their tricks, or some other analogous ones, in other businesses. The one who deals in oils to-day

will be a dry-goods agent perhaps within a couple of years, and in due course of time will try his hand on a dozen matters. In the meantime, the legitimate traders in the community—men who have a character to sustain or build up in their business—men who want to get a *life-long living* honorably through your trade, mechanics—are suffering, and your interests are suffering with them. The evil, perhaps, would be less if these swindling parties would confine themselves to the truth. Unfortunately they do not. You cannot expect them to. A trader who is in haste to make a rapid sale without regard to consequences—who will pursue such steps as I have before described—cannot be expected to remain *truthful*. Why, a case has come to light in which an agent for a house in one of our cities was trying to sell some materials to a coach-maker. The coach-maker expressed his satisfaction with the materials he had got from a firm with which he regularly traded, when he was told by the agent something to this effect: "Why, we supply Messrs. ——— with all the goods of this kind they sell." And yet these same Messrs. ——— were themselves the *manufacturers* of the goods they had sold the coach-maker.

But, Mr. Editor, it is of no use to go on adding words to words; but something ought to be done to awaken purchasers to the practices of traders such as I have described, and it was in hopes of doing so that I have written this. Let purchasers know that they have no obligation, moral or legal, to accept goods that are sent to them in response to their orders, when those goods are not of the quality or quantity that custom makes the words of the order to mean; and when they find themselves with fifty or a hundred per cent. more goods forced upon them than they have ordered, let them send back the goods, refuse to have any words about them, and pay no attention to threats or nonsense of any kind, and then let them find out who are honorable and fair dealers and trade with them. Thus these swindling establishments and their agents might be driven from the market, and our bosses and manufacturers would not be bored by these leeches, who, as most of us have practical reasons for knowing, will cling, and cling upon a man, till at last they get an order, given perhaps just to get rid of them, and then go away to fill it perhaps with twice as much as is called for, and even what is sent often turning out to be of inferior quality.

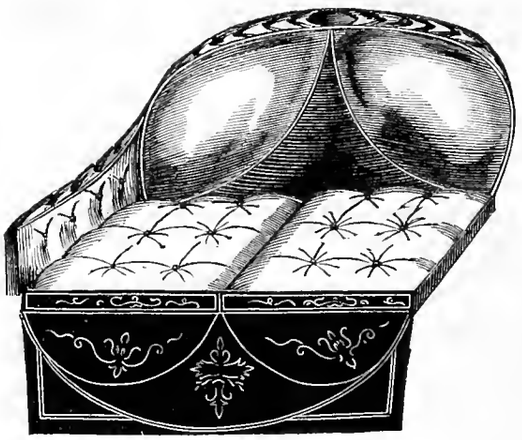
Yours, Badger.

Trimming Room.

For the New York Coach-maker's Magazine.

LININGS FOR A PRINCE ALBERT.

Mr. Editor:—I send for your Magazine a very pretty design for trimming a Prince Albert or Gig. In this, the back cushion and fall are divided by heavy seaming. The back lining is made from plain, dark morocco, divided into three sections (as shown in the drawing), by a seam formed by a cord, underlaid. The same process should be adopted with the fall. The dividing seams for the fall are bound cord, and should be sewed on by a careful hand, so as not to show the stitches. The fall, when stitched in accordance with the design, will make a neat



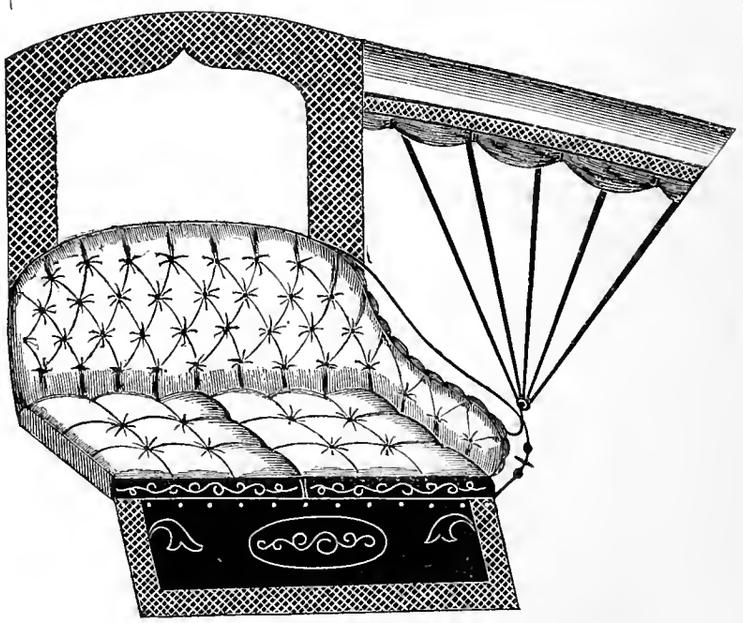
and showy job. Believing that this will be acceptable to the trimmer, I am Yours, truly, A Trimmer.

For the New York Coach-maker's Magazine.

DESIGN FOR TRIMMING A PHAETON.

Springfield, O., March 5, 1861.

Mr. Editor:—Enclosed you will find a very neat and original design for either a Phaeton or a Queen. It has



simply a full diamond back, and therefore does not need any explanation. The back quarter valances, as well as the side, are made from bow-leather, and neatly creased. If this will be of any service to your Magazine, accept, and oblige Yours, &c., R. J. Beck.

To our Friends.—Attention is called to the Prospectus to the Fourth Volume of this work, which commences with the June number. We are aware that the times are a little "out of joint" with the trade, but we are confident that our friends will not let their Magazine suffer, and will this year use a little extra effort to keep up our subscription-list. Please remember us.

The New York Coach-Maker's Magazine.

APRIL 1, 1861.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

RENEW YOUR SUBSCRIPTIONS.—*Our present subscribers will please bear in mind that our rule is to stop the Magazine when the year expires, unless they renew by sending us the payment* IN ADVANCE. *To secure a complete series, therefore, our friends will see the necessity of being prompt, for we intend to regulate our edition of the* FOURTH VOLUME *as near the wants of the craft as is possible. Western bank-bills and Canadian money, or post-office stamps, will be received at par. Subscribers in the British Provinces must remit twenty-five cents extra, to prepay postage for the year. Register your money-letters.*

BOUND VOLUMES *of this work are sold, singly, for* $3.50 *per vol., or Vols. I. and II., when purchased together, for* $6.50. *The two volumes, bound (including the subscription for the third year), will be furnished for* $9.50. *The three volumes, in numbers, will be sent for* $8, *when ordered. Single volumes, in numbers, will be sold for* $3, *or any single number for* 25 *cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for* 25 *cts.), can be had at this office for* 44 *cents. When mailed (the postage on which we prepay),* 55 *cents. Any volumes left with us will be bound for* 75 *cents each in our uniform style.*

OUR TRAVELING AGENTS.—*Mr. John Hewlett, of Toronto, is the only authorized agent we have in Canada West. Mr. Hiram Mills has the agency of this Magazine for Lewis County, N. Y. Mr. Matthew G. Peck, Jefferson County and some others.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

☞ *Our Southern subscribers are respectfully informed that we intend to reserve them a set of the numbers that may be due them should the mails be discontinued before their subscriptions expire.*

MASSACHUSETTS CHARITABLE MECHANICS' ASSOCIATION.

WE have been favored by attentive friends in Boston with the Managers' Report of the Ninth Exhibition of the above-named Association, held in Faneuil and Quincy Halls, in September last. From this we learn that about seventeen hundred persons, from various parts of the country, contributed the products of their skill and industry, to enhance the interests and increase the profits of the Association. Four years have elapsed since the last exhibition, and the progress marked is far greater than in former years, it being by all acknowledged to be, in the variety, usefulness, and perfection of articles presented, particularly those of machinery and new inventions, far before any hitherto held under its auspices, and so many that, after refusing many of the articles offered, the managers had to seek additional rooms to accommodate those articles already taken.

The number of awards were as follows:—18 gold medals; 136 silver medals; 192 bronze medals; and 368 diplomas.

Passing by the numerous articles not in any way connected with the business to whose interests this Magazine is devoted, we notice a description of the new invention of the Whipple File Manufacturing Co., for cutting files. The Committee state that "Many attempts have been made in years past by ingenious mechanics, and large amounts of money expended, to make good files by *machinery*, instead of hand-power, but, hitherto, with little progress. Previous to the Whipple invention, we understand the inventors of file-cutting machines have invariably endeavored to *imitate* the action of the hand in cutting *the tooth* of the file by striking the chisel with a hammer. In the Whipple machine, an entirely different principle is brought into operation,—the tooth of the file being made by the motion of a rolling *circular cutter* passing across a number of file blanks at the same time. One set of these machines (three in number) is tended by one man, cutting twenty-four files at a time, easily making twelve dozen files per day. These works have been in operation but a few months, and their files are consequently but little known; but so far as the Committee know, they have uniformly given satisfaction; and from the trial made by the Committee, with the *machine*-made files, and those made by *hand*, they give the preference to those made by their machines; they are of opinion that, ultimately, these machines are destined to come into general use for making files, as, upon them, files of any *width* or *grade*, from the *coarsest* to the *finest cut*, can be made. The Committee consider this machine, in the hands of competent workmen, capable of producing *better* files, at *less cost* than it is possible to produce by hand."

Among others, there was shown a double-acting bellows, for blacksmiths' use, producing a uniform and steady blast; different-sized paint-mills, of new and improved patterns, for grinding colors; improved vises; excellent specimens of anvils; blacksmiths' drills for iron; machines for planing irregular forms, planing by a pattern, and are so adapted that a great many regular and irregular forms may be followed, and particularly useful in dressing the felloes of wheels and other portions of carriage-work; improved bit-stocks, calculated to take in a bit of any size and form; a new modification of a parallel bench-vise, very useful in coach-making; several sewing-machines for manufacturing purposes; tire-benders, &c.

Among the manufactured articles was shown an improved carriage-window, for private carriages; carriage-springs and axles; wheel-jacks; wagon-wheels, &c., and a specimen card of coach-screws.

Among the exhibitors of carriages we find our friends, Messrs. James Hall & Sons; of buggies, Nichols, Thomas & Co., of Roxbury, and A. H. Watkins, of West Needham, Mass.

After noticing a case of paint-brushes from Messrs. Stimson, Valentine & Co., for which they were awarded a diploma, we find the following remarks in relation to a case of varnishes, from the same firm, for which they received a silver medal:—

"The case contains thirty-two varieties, drawn from their large cans. Specimens of these and other varnishes, English and American, long exposed to the weather, were compared; and the Committee are satisfied that these possess unusual qualities of purity, gloss, and durability. It is gratifying that an article till recently obtained only from a distance, though the raw materials have been furnished by Massachusetts commerce, is now manufactured in our midst. The proprietors deserve commendation for the unwearied pains they have bestowed on their articles, and for the great degree of perfection to which they have brought them."

Among the paints, are noticed white lead ground in oil; permanent greens; chrome green in jars; lampblack, "very fine, soft, free from grit, and dries well"—a very fine article for coach-makers—these from different manufacturers.

At the risk of extending this article further than our original design, we cannot resist the temptation of adding some well-timed observations on "Capital and Labor," from the able address of the Hon. Emory Washburn, delivered before the Mechanics' Association, and appended to this Report:—

"Of the many difficult problems which present themselves to the minds of reflecting men, there is, perhaps, no one more difficult to solve, as a matter of political economy or social duty, than the true relation between capital and labor. If it is ever to be solved, it must obviously be done by men of practical sagacity, rather than by theorizers and speculative abstractionists.

"I do not say that it is your duty to do this, or that it can be done by any one. But sure I am, that if ever the problem is solved, it must be by men situated just as you are, who have practically filled both capacities of capitalist and laborer, of master and man, and know the difficulties and embarrassments which stand in the way of each.

"The complaint has been repeated a thousand times, that capital carries off the lion's share of what labor has produced. And in the old world this has too often been true. Capital, there, has been so far concentrated within a comparatively few hands, that it has had altogether the advantage of labor, which, by being overstocked, is always competing with itself, and compelled, thereby, to accept the lowest rate of compensation at which life could be sustained.

"The evil, moreover, has been one which has gone on perpetuating itself by forcing the operation to forego the opportunity for study or intellectual culture, in the constant struggle by which alone he has been able to supply his animal wants. And thus unable to rise above the condition of dependence, he has left his children to renew an unequal contest with the very wealth that feeds them. The pictures which have so often been presented to us, of the condition of the working classes in the mining and manufacturing districts of England, have shown us what are the fruits of such an unequal division of profits between the few who furnish the capital and the many whom it employs. With the one, wealth has been going on doubling and quadrupling, while, with the other, its gains have rarely been sufficient, even in the periods of prosperity, to carry the working classes through the seasons of adversity which are sure, at times, to follow those of success. The consequence has been, that beggary and want have crowded the almshouse as often as employment has failed, or a period of scarcity has forced up the prices of the necessaries of life.

"There is little use, however, even there, in sitting down to deplore this state of things; and, fortunately, there is rarely, if ever, any occasion in our country to indulge in lamentation over the sufferings of unfed or unemployed operatives who are willing to work.

"Much less is there any practical utility in reading homilies to employers, for not paying high wages, when labor is plenty at low rates in market; while to seek redress under the instigation of desperation or revenge, by compelling employers to pay uniform or arbitrary prices by means of organized strikes, is seen, in a vast majority of cases, to recoil upon the heads of those for whose pretended benefits they were originated.

"Capital, in such a case, has the decided advantage of labor in the contest. That may cease to draw its profits while unemployed; but labor, in such a contingency, not only ceases to earn profits, but is compelled to consume what it may have already reserved, and to become every day less able to maintain the struggle. And even if, as is sometimes the case, the strike finds some employer unable to stand up against it, and he is crushed, while his neighboring capitalists maintain their integrity, the effect is to diminish the demand for labor, and lessen the chance of coercing them to yield to terms. And if we may suppose the most favorable circumstances for such a strike, and the employers, as a class, are driven to pay wages beyond what the market will return to them in the form of prices for their goods, they must, in the end, stop work altogether, or, what is more likely, taking advantage of the fluctuations which attend every business, they will, in the end, remunerate their losses by exactions made at times when the operative, in turn, is obliged to yield. And thus an unnatural war is carried on between the employer and employed, whose interests ought to harmonize and be identical.

"This, as I have said, is far from being a new question, either in economy or morals. It has engaged the earnest study of profound thinkers, the vagaries of idle dreamers, and the speculations of impracticable theorizers, some of whom have undertaken to lay down rules and canons for settling the rights of capital and labor, which read much better on paper than they work in practice.

"Among these theorists have been the famous St. Simon, of France, and his still more famous countryman, Fourier, whose vagaries have found earnest advocates, even on this side of the water.

"The theory upon which they rested their system of reform, was, that the evils of society grow out of its original bad organization, and this reform was to consist in carrying out the idea that 'to each man there should be a vocation according to his capacity, and to each capacity a recompense according to its work.'

"What a hubbub and confusion would there be witnessed in this world of ours, if such a theory were to be once adopted! What a bubbling and seething in this great social caldron in which we are all afloat, if every man was consigned to just the vocation to which his capacity fits him! How many a pulpit would be vacated, and bar thinned of its members? How many a politician, now on the crest of the wave of popularity, would find himself

and his patriotism floundering together in the mire, while names, unknown to fame, would be enrolled among the prudent counsellors and honest statesmen, whose memories brighten in the light of history?

"Another part of this theory was, after appropriating enough of the products of a common industry to supply each citizen with his ordinary wants, to distribute the surplus so as to give to Labor *five*, to Capital *four*, and to leave *three* parts only for Talent.

"But a theory of socialism, visionary, even for Paris, with its 250,000 work-people dependent on their daily wages for their daily bread, could, obviously, never be carried out in such a country as ours. And the problem is still unsolved. * * * * *

"Is it not true that something remains yet to be done, even here in New England, to give to labor its true position and just relation? In a community where public sentiment is so potent, is there not something for the master mechanic, the manufacturer and employer, as well as the laborer himself, to do, to give to this moral power a healthier and a more thoughtful tone?

"No man speaks openly, it is true, in disparagement of those who toil in the workshop or the field; and it is a part of the small charge of politicians, at certain seasons of the year, to deal liberally in glowing eulogies upon labor. But if this is in reality the leading, prevailing sentiment in the community, why are so many eager and studious to find some mode of gaining a livelihood which does not bring with it the hard hands and bronzed visage of hard work? Why are the professions crowded with indifferent preachers, fourth-rate lawyers, and M. D.'s, authorized to do no good *secundum artem?* Or why is the country overrun with itinerant lecturers, and 'professors' of all imaginable *ologies*, while stout, bewhiskered representatives of the sex out of which mechanics are made, usurp the province which should be left to their more manly sisters, playing milliners, measuring tape, assorting worsted yarns, and arranging and showing up for admiration, 'Heaven save the mark!' the wonderful network of a lady's crinoline?

"It is not merely because such men love their ease, or shrink from physical endurance, that they degrade themselves into the foolish fancy that they are, thereby, getting above the level of labor. Many of those who would as soon touch a torpedo as a spade, or be shocked into hysterics by the dust and din of a smith's shop, would trudge all day, with a gun in hand, and a dog for a leader, to circumvent a brace of harmless woodcocks, or tramp through mire and bushes, bitten by black flies, and stung by mosquitoes, to capture half a score of infantile trout, whose youth and inexperience should have been their protection.

"The truth is, call a thing *labor*, and many a man will vote it irksome, and shun it as unbecoming his dignity; whereas, call the same thing pleasure, and he will go through it as if it were so, though it calls for a degree of endurance that a man would not think of imposing upon a hired day-laborer.

"It is hardly necessary to add, that notions like these must, somehow, be rectified, before men will be willing to call things by their right names, or act as if labor was not one of those necessary evils which a man endures simply because he cannot escape it. And let me say, in passing, that no body of men ever had a more favorable field, or more effective means for carrying on any great work of social reform such as is here contemplated, than your own Association. The institutions necessary to aid in its accomplishment are already provided at your hand. Even the traditional pride of pedigree can operate but as a feeble barrier in a community where scarcely a man who is known at all would not show some implement of labor quartered with the arms blazoned on his escutcheon. Schools are the common property of all. College honors have ceased to be monopolized by what are called the learned professions, while the evidences of thrift and comfort and personal independence scattered all around us are identified with the success which is crowning industry and systematic labor in every form.

"With mechanics in our town and city councils, in our legislatures and in Congress,—with one of your own number worthily presiding over the interests and well-being of this noble city, whose charities are as broad as humanity, and whose enterprise, that feeds them, is as untiring as the wind that wafts her commerce, or the steam that moves her wheels,—here, surely, if anywhere, may be successfully wrought out the great social problem of placing the honest pursuit of busy industry on a common level of a people's respect."

DISCOUNTS AND POSTAGE.

MANY of the banks in the Southern and Western States are either at a large discount, or else find no sale in New York at the present time. Under such circumstances, we would urge upon our friends the importance —especially is it important to us—of using all the care possible to make their remittances for subscriptions to this work in such funds as we can use without submitting to the enormous *shave* that brokers charge on uncurrent money when they have the opportunity. The better way is to send the gold, secured in a piece of pasteboard or card so effectually as to guard against getting loose and shaking out in the transmission, or to send us the bills of New Jersey, or of any other banks in good repute, of the States eastward of that. As the larger proportion of our subscribers at this time of the year are from the Western States, their attention is particularly directed to this notice. Where the bills of Western banks which are about 10 per cent. below par are sent, we shall expect the loss to be made up, by inclosing the amount of the discount, in stamps, along with the money.

A word to our Canada friends. Some of them are so very *prudent* that they fail in remitting the 25 cents extra for the postage we must pay before their Magazines can be sent from the New York post-office. Now, there is no reasonable excuse for such practices, as the *silver* change can be readily transmitted through the mails. Provincial stamps are of no value here. We do not like to threaten, but we would *hint*, that when our British Provincial friends open the game, they must expect to be check-mated, by receiving only eleven numbers, instead of twelve, for their three dollars. As we have stated elsewhere, *all registered letters will come at our risk.*

Notwithstanding what others may say to the contrary, we think this the safer way to send money; and until we meet with *the first loss,* we shall continue to think so.

ONE NUMBER MORE AND THIS VOLUME CLOSES.

With the publication of the next number, which completes the third volume of this Magazine, we shall, as has been customary with us heretofore, present our friends with a handsome title-page to match the former volumes, and a full index to the engravings and letter-press articles, with a preface, thus putting it in a shape that will make it valuable for binding, into a book of reference for future use. Those who may desire the volumes of this work bound, will still be furnished with sets complete, or with single volumes. Covers will be prepared to match the first and second volumes, at 55 cents each, by mail, postage paid, or, for 44 cents at the office of publication. We send the bound volumes to order, by express, at the rates we advertise, to be paid for on delivery, provided the costs for transportation are paid for by the purchaser. No coach-maker should be without these volumes. They embody a mass of matter of the greatest importance to every member of the craft, that can no where else be found. The so-called French Rule, Scale Drafting, Smith-work, Painting, Trimming, and numerous observations of a practical nature, all made by writers of much experience, will be found therein. As a compendium of scientific information in the art of coach-making, it has never yet been equaled—so the American public has pronounced. Send along your orders, if you please.

ENTERPRISE AND CARRIAGE MATERIALS.

In the face of hard times, and with commendable enterprise, our friends, Messrs. F. S. Driscoll & Co., will, about the 1st of April, vacate their present premises and establish themselves in the fine marble-front building, 185 Bowery. We understand that it is their intention to increase their stock in amount and variety, so as to be able to accommodate all who may be in want of materials for manufacturing carriages.

FISHER'S STEAM CARRIAGE.

This carriage, to which frequent allusion has been made in our pages, is now undergoing such modifications as the inventor's experience has suggested as necessary, and when in running order, we hope to be able to give our readers some practical ideas in relation to its workings.

DRAFTING CARRIAGES.

Should any of our readers have drafts of their own designing, that they would like to have drawn correctly to scale, so as to hang in their offices, they are respectfully informed that we have an artist in our employ who will do it to the full satisfaction of any who will favor him with their sketches. A rough plan, with the dimensions in figures, will answer all purposes. The uniform price for such service will be $3 each. The whole business can be transacted through the mails.

ANSWER TO "LEX."

Carriages Taxed by Congress.—"Lex," who inquires on page 178, is informed that, in the year 1794, Congress imposed a duty on all "carriages which were kept for the conveyance of persons," &c.; to wit,—for every coach, the yearly sum of ten dollars, &c. This law was contested in the Supreme Court, upon the ground that direct taxes ought to be apportioned among the States, according to their numbers. The decision was, that it was not a direct tax within the meaning of the Constitution. I think the law was repealed in 1798 or 1799. H. H.

Berlin, Wis., Jan. 20, 1861.

The Coach-Maker's Letter-Box.

LETTER FROM LOUISIANA.

New Orleans, Jan. 31st, 1861.

Friend Stratton:—After a tedious trip of twelve days on the Mississippi, I walk the crowded streets of the great commercial emporium of Louisiana. Stepping from the steamer *down* on the broad levee, covered with sugar-casks, bales of cotton, and sacks of corn, while countless drays were hauling them hither and thither,—thence through the level streets to visit the thousand-and-one objects of interest that claim the attention of the stranger,—busy all the day, and now, that night has come, I sit down and try to realize my situation. From the blazing coal-fires of St. Louis, where one sits shivering at the thought of stirring out to brave the ice and snow and bleak nor'westers of that frigid climate at this season, down to the green forests, blooming gardens, and *ice*-water of New Orleans,—really it is too great a transition to appear real, even in this fast age.

But here I am, sitting by an open window, *enjoying* the cool evening breeze, fresh from orange groves and Lake Pontchartrain,—and would you, denizens of the North—perhaps at this identical moment out sleigh-riding with blue noses and red ears—would you believe it?—a servant but just now entered with a waiter on which were placed an iced lemonade and a fan, both of which were very acceptable.

New Orleans is a curious compound of oddities. Cross a single street, and you go from New York to Paris. Above Canal Street, all is American,—American signs, stores, looks, and actions. Below, everything is French,—signs, streets, houses, men, women and children—all French, and jabbering away at an un-keep-up-able pace in that tongue-twisting vernacular. It was here that I passed most of the day. Sometimes I would stand on a street-corner and watch the endless throng pass by me; then look into the tastefully-arranged shop or store windows until tired; then saunter into a public garden, and, in the delightful shade of broad-leaved bannas, sip coffee and eat oranges—glorious, golden oranges, fresh and sweet from their native orchards; and then, above

all, to be waited on by *petite* French girls, ever smiling in the sweetest manner,—*Oublier je ne puis.*

The public park, or garden, must not be forgotten. It is small, occupying only one square; yet one can never tire in lingering amid its delightful walks. Faced by the river, flanked on either side by buildings exactly alike, while the tall spire of the Roman Catholic Cathedral, rising high above the huge walls of the church, bounds it in the rear,—all is in keeping with the place—romantic and beautiful. Here you can tread graveled walks, bordered with roses in full bloom, and pinks, and many other varieties, among which the bees are flitting; and if weary you can sit down on a pleasant iron sofa, beneath a dark-leaved magnolia or orange tree, and breathe the fragrant air to your heart's content.

A magnificent statue of Gen. Jackson on horseback, in full military dress, occupies the center of the park. Of course it is almost idolized by the old inhabitants of the place. Who would believe that the very spot on which it stands was once occupied by a guillotine where criminals were executed under the old French rule? Yet such is the case. H. S. W.

[This letter, from some unaccountable cause, did not reach us until too late for our March number, but although dating two months back, its general interest will be a sufficient excuse for placing it before our readers. It may be proper to state that if correspondents to our "Box" would desire an early insertion of their letters, they should reach us by the 10th of the month preceding date.—Ed.]

LETTER FROM ALABAMA.

Eutaw, Ala., February 11th, 1861.

Friend Stratton:—Amid the cotton-fields of Alabama, I sit down to write this brief letter. After years of wandering, I come once more to the pine forests and great chestnut trees that remind me of boyhood. How many a day have I passed lying on the soft leaves beneath the lofty pines that line the sea-shore of my native State, or in wandering o'er the hills, chestnuting on a cold, frosty morning in October! The first sight of a chestnut-bur, a day or two after my arrival here, awoke memories that had remained buried for long years.

In good plain English, I like this country. The weather is cool and pleasant, about like October in New York, and already my health has improved wonderfully. [Wait until the ther. becomes *stereotyped* at 106° in the shade for three months at a stretch, and perhaps I'll change the above.] I have followed the *Solomonian* (I believe that's original) wisdom of the immortal Bard of Avon, and "thrown physic to the dogs." Get up at daylight and walk half a mile or so before breaking my fast, work about ten hours, read and *scribble* until eleven, then sleep soundly until daylight comes again.

Thus you see I am fairly settled in the "Land of Rest." Let me explain without a marginal note, for I don't like them. Once upon a time, so tradition runs, a tribe of Indians, after being defeated by another tribe, retreated, and coming to a beautiful river, halted on its banks, when the chief placed a pole in the ground, exclaiming, "Alabama," which signified in their language, "Here we rest;" and thenceforward the river was thus named. Some one of our poets has written some very pretty verses on this legend, which I remember reading years ago.

Spring is slowly dawning on us. Already the maples are in full bloom, the elm-buds are bursting, and the "wee, modest little violets" greet us in fence-corners and along hedge-rows. Wait until spring fairly clothes the great trees in full leaf, and perhaps you'll be *bored* with "Alabama in Spring-time," or something with an equally high-sounding caption.

I presume most of the readers of these lines, who have learned the arts and mysteries of coach-making, and mastered the square rule, would very politely hint, if they could see me, that a few words about coach-making would be more befitting and acceptable than all this gossip; so here it is:

If any of you have a desire to come South, get rid of it as soon as possible, unless, indeed, you have plenty of loose change and wish to see the country. At present but little is doing in our line, owing to the unsettled state of public affairs. If our political difficulties are settled peacefully, then good, steady carriage-makers can do well here, but not until then. The carriages made here far exceed my former expectations, for style and beauty of finish. I have seen some jobs that would reflect credit on any Northern shop,—and then, again, some that wouldn't. Almost every planter has a coach, a top-buggy, and a trotting-buggy, most of which were made at the North, but hereafter they will be manufactured at home.

Yours, very truly, H. S. W.

LETTER FROM OHIO.

Bell Brook, O., February 15th, 1861.

Mr. Editor:—*Dear Sir*, I am sorry to see that in the Magazine the Western men of the craft are not better represented in the ornamental line. As a Western painter, I take no small degree of interest in the Magazine. In looking over the late number, I gained more confidence in my ability as an ornamenter than I had before. With my limited experience and observation, I can readily say that our ornaments are smaller and neater in style than those in your last number. Numbers 2 and 3, especially, would take better with painters of cultivated taste. There has been but little, almost nothing, said as yet about dry coloring and sizing ornaments. As I possess some knowledge of this art, that has not appeared in your journal, my knowledge in this line is entirely at your command, if desired. This, I suppose, will not meet the approval of but few painters, as they are all down on the system; all those I have talked with on the subject are partially down on the system. This I attribute to their limited knowledge of the business.

I was fortunate while working in Cincinnati, some two and a half years back, to fall in with an able German, Dialin by name, who is the only practical dry-color workman in the country, and the only original one. This man gave me the rudiments and foundation of the system, all but mixing sizes; for this I have a manner of my own, that differs from Mr. Scott's mixture.

I have also a good number of designs, some original and some picked up. If you have not a sufficient supply, I am at your service. I wish to see the Magazine prosper. Yours, truly, H. J. L. Marshall.

PRECOCITY DEVELOPED.—A DRAMA.

BY SHAKSPEARE, JR.

Dramatis Personæ.

Bob,—A precocious apprentice, recently from a country boarding-school; his primary education obtained in New York city.

The Boss,—Who is under the impression that boys are more mischievous than profitable.

Scene—*A Carriage Repository.*

Boss :—[Entering, is astonished.] You young scamp, what are you a-doing with fire so near that straw?

Bob :—[A little startled.] Just to show how easily this coach can be turned into a *light* wagon.

Boss :—[Angrily.] You're too smart, you are! You *turn* yourself out of my shop immediately, or I'll *turn* you into a wheel-barrow.

Bob :—[Confused.] I-I-I—don't 'zactly understand—

Boss :—[Approaching Tom hurriedly.] I tell you to clear out at once, or I'll foot you out!

Bob :—[Coming to his senses.] Yes, sir! I'll go as soon as— [Exeunt boy, sobbing bitterly, hastened by the Boss's boot *a posterior.*]

Boss :—[To himself.] I don't believe a carriage-maker ever made the first red cent by taking 'prentices at this business. I wish every boy I've got would leave, I do.

Broken Sets of the Magazine.—Those who require numbers to complete their sets of this work would do well to send in soon. Price, 25 cents each number—change in stamps.

PROSPECTUS OF THE FOURTH VOLUME.

THE BEST OF ITS KIND IN EXISTENCE, AND THE ONLY ONE IN AMERICA!

On the 11th of MAY next will be Issued

No. 1, Volume IV., for June,

OF

THE NEW YORK

COACH-MAKERS'

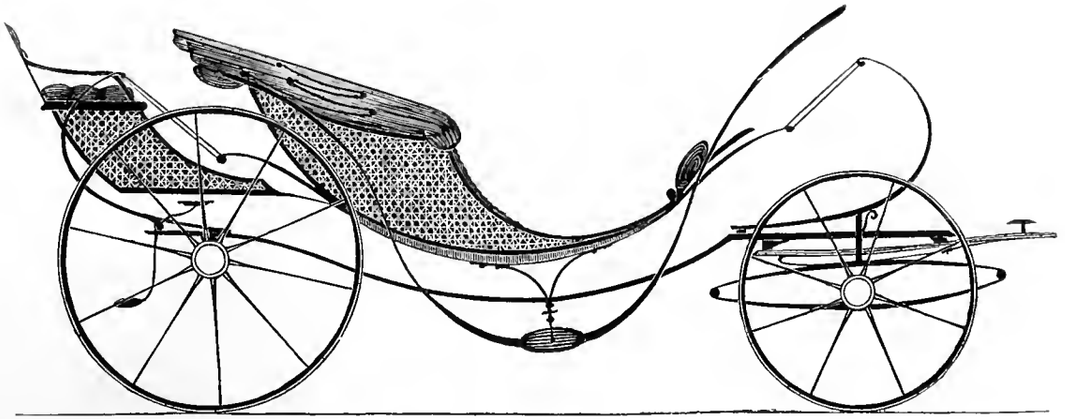
Monthly Magazine,

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Each number will, as heretofore, contain four Tinted Plates of approved working Designs (mostly original) for Carriages; Scroll, and other Ornamental Figures, for the Painter; Stitching, &c., for the Trimmer, and Designs for the Smith-work; together with 20 pages of Illustrated Letter-press matter, several pages of Advertisements of Carriage Materials, and a Cover; the whole calculated to benefit the Carriage-Builder in his interesting but difficult Art, and form the most valuable Companion for his Workshop ever offered to any body of artistic Workmen.

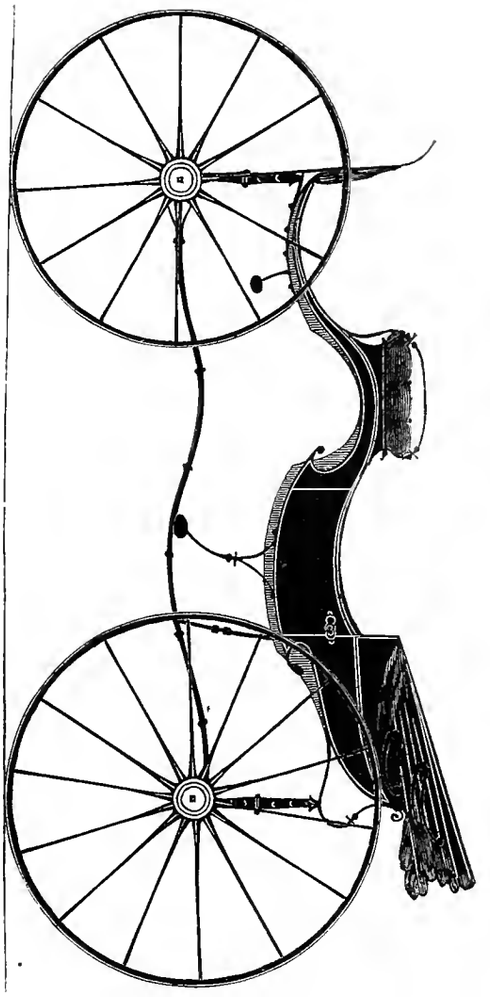
Three years have now passed since this work was first established, and though our country has been afflicted with pecuniary embarrassments during that period, which have sorely tried the coach-making fraternity, we have, so far, found friends to our enterprise, who, by their voluntary assistance in making up clubs, &c., have made it, up to the present moment, a paying one. We have likewise been favored by many able contributions to our columns, from the craft, without which our own labors would have failed in making the work as interesting, as we are proud to believe it has been rendered, to our patrons. To all these, we owe a debt of thankfulness which we despair of ever being able to discharge.

The Editor enters upon the preparation of his fourth volume, believing that, with the help of his many warm friends, who have given him encouragement that they "will stick by him," he will be able to meet the reasonable expectations of the craft, and furnish them with more practical matter than any other similar work has ever done, or can do. Promising to do our best to merit the continued confidence and approval of the craft, it only remains for us to ask that every friend to this Magazine will early renew his own individual subscription expiring with this volume, and endeavor to get all within his circle of influence to give us their patronage to the fourth year's publication. See the terms on the first page of the cover to this number, and secure the premium by a little exertion among your shopmates. Register your money letters and send in at the earliest period, that we may regulate our edition accordingly.



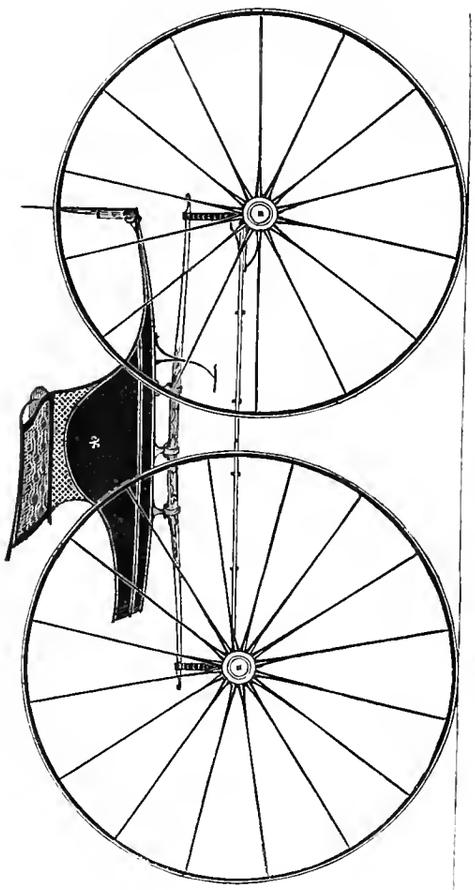
LADY'S PARK PHAETON.—½ IN. SCALE.

From MESSRS. HOOPER & CO., *London, for the New York Coach-maker's Magazine.—Explained on page* 228.



LIGHT CRANE-NECK PHAETON.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—*Explained on page 228.*



UNION BUGGY.—½ IN. SCALE.

Designed expressly for the New York Coach-maker's Magazine.—Explained on page 228.

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Vol. III. NEW YORK, MAY, 1861. No. 12.

Miscellaneous Literature.

For the New York Coach-maker's Magazine.

THE AUTOBIOGRAPHY OF CALEB SNUG, OF SNUGTOWN, CARRIAGE-MAKER.

(*Concluded from page* 110.)

CHAPTER XI.

Caleb's friends bring "the shorts" upon him—A confidence game frustrated—A second confidence customer is more successful—The tricks of trade illustrated—Caleb having been elevated to a "position of honor," takes leave of his readers for the present.

Vexations, such as detailed in the preceding chapter, constitute but an item of the trials bequeathed to a carriage-maker. Those in the larger cities may find it more easy to collect bills than those in such villages as Snugtown; *if* they do, why I am glad of it. I apprehend that it would have been better for me had I gone into some strange place and hung out my sign, for the numerous *friends* I found in Snugtown came near ruining me; indeed, I realized the sentiment of John Randolph when he prayed to be delivered from *his* friends! Many of my customers took it for granted that I did not need their money, and *only* wanted their custom, judging from their practices. This state of business brought intermitting fits of "the shorts," and left me very frequently to close up a week's account by shinning it to get the money wherewithal to pay my hands, and going to my lodgings with a collapsed pocket-book, and a poor prospect to commence the next week with. The Snugtown community—like many other communities where decisions are made up from superficial observation—*imagined* that because I usually had a large parade of old wagons around my premises, that consequently I was getting rich very fast, and could, therefore, very well afford to trust them.

But there was one confidence game undertaken by a stranger which I saw through at once. Late one evening, just as I was about closing up my shop, a gentlemanly-looking man, accompanied by a well-dressed female, drove up in a fine buggy, with a stylish horse before it, and wished to look at some of my buggies. As usual with me, I took great pains to show him my stock of finished work, and after making a selection that seemed to please him, he said he would take the carriage, and give me his note, payable in six months. The fellow expressed himself astonished at my unwillingness to sell on such terms, and declared he could have what he wanted of the Sawgetup firm for his note, without any hesitancy. I very respectfully told him that he had better give them his custom; *I did not want it.* "But," he added, "I do not like the style of their work as well as yours." The fellow took his departure, and, on inquiry, afterwards, I learned that he had not even called on my neighbors, and that the whole thing was a *ruse*, in order to "chisel" me out of my property. For a new beginner, I now began to think I was getting sharp!

In this frame of mind I was called upon, in a few weeks, by the servant of a gentleman in a neighboring town, who (as it subsequently turned out) took this course to "raise the wind." On entering my shop he commenced to extol my ready-made carriages, mentioning that "the boss" was about to purchase a new one, and that if I would call at No. — Fourth street, early the next morning, I would certainly secure the job, "for the boss is a sporting gentleman, and is willing to pay a good price to get a good article, and you are just the one to please him." In this strain of flattery, with my vanity raised to the highest degree, my visitor, very opportunely, threw in a request that I would lend him a dollar, which he would certainly repay within the week. Although proof against the machinations of a customer offering a long note for a ready-made carriage, yet I had not the fortitude to resist *the influence* I might probably secure in obtaining a cash order for a "light trotter," and so I parted with "the tin" without hesitancy; after receiving which the stranger "vamosed." The next morning found me early at the place designated; but, instead of finding "the sporting gentleman," I found a tenantless house, and a strong suspicion that Caleb had been "sold." This "sell," however, was a "small-potato" affair, when compared with the "big strike" undertaken by another party soon afterwards, and which well illustrates the necessity of being cautious while dealing with strangers.

Having been visited, one day, by a very gentlemanly personage, one of the finest carriages in my show-room was selected, the price fixed upon, and the terms discussed. Being in an extensive trade, and business just then a little

dull, it would accommodate him if I would give him a little credit, which he declared might be done with perfect safety, as I would find by calling on Compton & Co., brewers, in N—— street; Thos. Short, Pineapple street; or C. Trickster, in Confidence lane, liquor dealers. These, my new customer assured me, were gentlemen with whom he had dealt extensively, *and knew all about his responsibilities.* I confess I did not exactly fancy the proposition now offering, but still curiosity, as well as interest, led me to make the call upon the parties named, *and I lost all!* A recital of how it was done may prove instructive to the reader.

It appears that there was a regularly-organized gang of swindlers, with their plans so arranged that they generally succeeded in anything they undertook to carry out. The first movement, in all transactions of this kind, is to obtain *credit;* and this, to succeed, must be based on *confidence,* to gain which a person must, in some cases, have either confederates or friends. Let us illustrate the *modus operandi* in the case referred to. A comes to my factory and purchases a carriage, but does it on credit, I agreeing to take his note. But he is personally unknown to me, and so I must have a reference, to establish his responsibility. A refers me to Compton & Co., and others. When I call upon C. & Co.,—who appear to be transacting a respectable business,—they assure me that A is perfectly good for anything he purchases, "we having had dealings with him, and always found him safe—would like to sell him all the goods we possibly can." Waiting upon Thos. Short, he tells me he has never had much acquaintance or business with A, but he has always heard him well spoken of, and in what dealings he has had, he has always found everything correct. Trickster & Co. confirm me in the opinion that I am dealing with an honorable customer, by endorsing the sentiments of *his* best referees. How many carriages has my reader "sold" in this way?

Persuaded by such "*good* references," I conclude to take A's note for the carriage, but, when it matures, I find it protested for non-payment, at which time A has sold the carriage bought of me. On inquiry of disinterested persons, I find that A is not only a worthless scamp himself, but that his referees are, as the Quaker said, "no better than they should be," and, probably, confederates, and that when these same fellows have occasion, they use A as a reference in return. In fact, these chaps form a nest of swindlers, all bound together in *kind* offices to each other in order to swindle the public.

Again, I had a customer who had always been very prompt in his payments, and, of course, I could not refuse to trust him. This man, strange as it may appear, suddenly showed himself a rogue. He purchased a wagon *on time,* sold it immediately, and with the proceeds of this and other dishonest purchases decamped "between two days" to parts unknown. This last example may be deemed a rare instance, and so it is; but the conclusion is, that when a carriage-maker sells his wares to an entire stranger, and depends altogether upon *his* references, the chances are nine to one that he will never be paid.

My readers will understand that I would not make the impression that all strangers are rogues—far from it; but were carriage-makers a little more careful, they would have less reason to mourn over their losses. The business itself is not very remunerative for the capital invested, and it is burthened with perplexities enough to discourage most persons under the most careful management. These need not be enumerated here, since they will be seen quite soon enough by those who are so venturesome as to engage in the business.

With these remarks, I will take leave of my readers for the present, in the hope that the discharge of the duties of the office to which my Snugtown friends have elevated me will bring some relief, if not profit, and that the stream of life may run more smoothly hereafter, under the cheering smiles of that public to whom I am indebted for distinguished honors.

For the New York Coach-maker's Magazine.

CLARENCE CLIFFORD,

OR THE EXPERIENCE OF A TRAMPING COACH-MAKER IN THE WESTERN COUNTRY.

BY H. S. WILLIAMS.

(*Concluded from page* 204.)

OCTOBER, brilliant in its gorgeous drapery of frost-tinted foliage, dawned upon us, with its misty curtains resting over the distant hills, while our very senses seemed paralyzed with the dreamy indolence of nature.

After much thought on the subject, we concluded to seek for a better location; and, as Luby had set his mind on the "Sunny South," we dispatched letters to several places in Alabama, making inquiries about work. In the mean time we called for a settlement, which, after many sharp words, was promised us the following Saturday. On going to the post-office the same evening, I received a letter directed in a strange hand; and, on breaking the seal, read as follows:—

MR. CLIFFORD.—*Dear Sir:* I learn that you talk of leaving Columbia; and, if such is the case, I should like to have you work for me this winter. I want just such a hand as you are represented to be; and, if you come up, you'll find plenty to do. You can work by the week or piece, at Columbia prices. I also want a good painter; if you know such an one, tell him to call on me. Please come, or answer this immediately.

Very respectfully,

A. TWITCHELL.

P. S.—As I have several *cash* jobs ordered, you will see the necessity of dispatch. A. T.

FAYETTE, Mo., Oct. 10th, 185–.

Hastening to Luby, I read the letter, which instantly drove all thoughts of the "Sunny South" from his head, and he exclaimed, with his usual impetuosity, "In luck, surely; but say, wasn't it a lucky thought in him to add that P. S.? Plenty of *mon.;* that *tea-kettles* me very much; *mon.* is what we want; 'tis the central system around which all the planets of humanity revolve." And he launched forth in a glowing eulogy of the "root of all evil."

The following morning I proceeded to Fayette for the purpose of seeing how things would suit us. I found everything better than I had hoped for,—a warm shop, good bench, with iron vise, and *clean* lumber. So, after an hour's talk with Mr. T., I left, promising to return the next Monday, and bring a good painter with me. Effecting a settlement on Saturday, we packed up our things, and, taking the stage early Monday morning, we reached Fayette in time for dinner. The afternoon was passed in putting my tools in order, and selecting lumber for my first job. As Luby found several old buggies to repaint, we both commenced work the next morning, in the best of spirits.

Mr. Twitchell seemed to be a clever old gentleman, fond of jokes, and, above all, easily pleased; so that everything passed off pleasantly about the shop; and we voted ourselves satisfied with all exeepting our hotel. That was an "old-fogy" institution, with its "corn-dodgers" and "sinkers," as Luby persisted in calling our corn-bread and blaek, heavy biseuit. This, however, was of short duration; for, becoming acquainted with a widow lady, we persuaded her to board us during the winter. A large, pleasant room was prepared for our accommodation, with a lounge and book-case, rocking-chairs, and everything that betokened comfort; while the table was *votorum summa* in the way of edibles.

Like other small western towns, we found but little sociability existing among the young folks towards strangers; but, as the lady with whom we boarded, together with her grown-up son and daughter, were very kind, we passed our evenings quite pleasantly.

After tea we would usually seek our room, where Pompey, a little negro boy, who was set apart solely for our service, had built a fire; and, lighting our lamp, Luby would busy himself in drawing ornaments or in sketching portraits, while I would devote the long hours to reading my favorite authors, principally historical, only turning aside now and then to drink at the Castilian fount of poesy.

As we were thus seated by a eheerful fire, one cold evening in January, Luby threw down his pencil, and after surveying the scroll he had been drawing for a moment, cast it aside, and turning towards me, exclaimed, "Clifford, let's put up a fine buggy between us. I know of a first-rate chance to dispose of it to a gentleman living out in the country a few miles. He owns eighty acres of excellent land down on the Mississippi, and he wants to trade it for a buggy; and he told me he'd give a first-rate bargain if we'd make one to suit him. He's rather tasty, and talked about going to St. Louis; but I told him we'd finish one better than any he could buy there. I also spoke to the boss about it, and he's perfectly willing for us to put it up. What say you?"

"I'm in for it with a hearty good will," replied I, and, getting my drawing-case, I proceeded to draw a body for the job, partly original, and altogether new in that part of the country.

The next morning I commenced working on it, and in due time we finished off a splendid job, elaborately carved and tastefully ornamented, so as to take the eye of our expected customer. Luby tried his best on the painting, and, in truth, when he pronounced it finished, it looked like a picture. Hearing that it was done, the gentleman for whom we made it came in, and after one glance he eagerly offered us the eighty acres of land for it; and, as we had learned it was pleasantly situated, we as eagerly accepted it. In turn, Luby offered me his half of the land for one hundred and twenty-five dollars. Taking him up, I thus came in possession of my first real estate. It is strange what a change came over me as I folded the deed and put it away in my trunk. I felt proud at the thought that I was the actual possessor of a few aeres of land, for it seemed as though I had something to bind me to earth. A pieee of land, be it ever so small, makes one feel truly independent, and I know of no happier picture than to see a strong man resting beneath thick-leaved branches, in midsummer, while he can look up and say, "These are my trees."

That same evening I received a letter from Thalia, and after writing a long answer, wherein I told her of my good fortune, I added a brief note that ran in this wise:

"Perhaps you may remember one evening last winter, while you were assisting me in looking over some school exercises, we came across a line from Virgil, which we translated thus: 'True friendship existing between young persons of the opposite sex begets love.' We laughed at the idea then, as you remember, but now experience compels me to add my testimony with that of the Roman poet; and unless you ean agree with me, I fear our correspondence, so pleasant to me, must cease, for I feel that I am treading on dangerous ground. I should like to visit you, if agreeable to your wishes, and then we will understand one another better. Shall I eome?" Sealing the letter, I dispatched it to its destination, and calmly awaited an answer. After many long—very long—days it came, and, seeking the solitude of my room, I broke the seal with trembling hands, when, among many other things, I read: "Candor compels me to admit that the old poet knew more of human nature than I did at the time of which you speak. But I will not stop now to write my feelings on this subject, for I shall expect to see you soon; and, believe me, I shall be but too happy to have you visit our prairie home, where you will be warmly welcomed by our little family."

"Written, like a plain, sensible girl, as she is," thought I, and, folding the letter, I laid it by earefully, as something too sacred to be seen by aught but my own eyes, and then, sitting down in the great roeking-chair, I gave myself up to sweet reflections of the future that now opened so gloriously before me.

On the great "Father of Rivers," but two hours' sail from the metropolis of the Mississippi valley, one who has an eye for the beautiful will not fail to detect a small Gothic cottage, situated about two hundred yards up the gently receding bank, and embowered as it were in a grove of forest and fruit trees, while here and there, sometimes enthroned on eireular mounds, sometimes on the level lawn amid the maples and elms, an evergreen rears its cone-shaped top in pleasing contrast with its loftier neighbors. Along the bank of the river, just above highwater-mark, is a live-fence of osage-orange, and from thence to the cottage the eye can survey at a single glance green mounds embroidered with violets and other early spring flowers, flower-beds lined with sea-shells and box-wood, broad, graveled walks, and grapevines with their slender branches trailing over arbors of every conceivable shape, 'neath one of which a stream of crystal water issues forth in the pure sunlight, and after forming a series of semi-circles and miniature caseades, it leaps into the river below. Beyond the eottage, broad fields can be seen stretching away to the level prairie full a quarter of a mile distant, with large orchards of choice fruits—apples, pears, and peaches, cherries, nectarines and plums. In front of the dwelling is a broad verandah, enclosed with lattice-work, on which one can sit and see the noble steamers as they glide past, laden with the products of the richest valley in the known world, for the neighboring city, else freighted with merehandise for the up-river towns. Beyond the river the broad prairies of Illinois stretch away to the eastern horizon, thickly covered with white farm houses, rising out of the green foliage of shade trees by whieh they are surrounded.

And this is my home. As I sit in my library to-night, I see the sun sink below the ridge above us, and hear the cattle low, and fowls cackle, and horses neigh—the sweetest of rural music, that can only be truly appreciated by the farmer. By looking out of the south window one can see the various outbuildings, and prominent among them is a small shop where I pass the rainy days—and some pleasant ones, too—in working with my tools at some agricultural implement or piece of fancy-work, and every chisel and saw and plane seems like old, familiar friends, so closely are they all connected with my past career. The east window commands a view of the lawn, where the trees are just clothing themselves in green; while, below, the broad river sweeps swiftly by, with its waters growing darker and darker each moment as the shadows of evening gather over it.

Here in the library everything is cozy and comfortable. A bookcase occupies one side of the room, with its shelves filled with choice books, besides a large cabinet filled with stuffed birds of rare species, and geological specimens of great beauty. A few pictures are suspended from the wall, while, between them, hanging on nails and hooks, is a variety of war-clubs, necklaces, pipes, tomahawks, bows and arrows, together with other Indian curiosities.

We have interwoven a few characters in our humble history, of whom, perhaps, you would like to hear more. While overhauling a trunk to-day I came across an old journal, and on turning its leaves found a wreath of withered flowers, gracefully twined with a bunch of dead leaves, on a twig of pine. How old memories came over me, and I felt a strange moisture about my eyes, as I gazed on that memento of the past; and singularly enough, just then a letter from our old friend Worthington was placed in my hand, wherein I read these words: "You remember Lizzie ———. I have a sad duty to tell you about her. Over a month since she disappeared very suddenly from home; and, as a young spiritual lecturer, who had been stopping in Greenfield for some months, left about the same time, it was generally supposed she had eloped. Nothing more was heard from her until yesterday morning, when her mother found a note on the table, wherein she bid all her friends good-by, and requested them to search the old pond. They done so, and found her body, cold and lifeless, yet strangely beautiful, and to-day we buried her in the forest cemetery, beneath a wide-spreading elm—a fitting place for her to sleep after 'life's fitful fever.'"

Worthington is the same easy genius as of yore—everybody's friend, and a universal favorite with the ladies. We sigh to think one so fitly endowed with all the talents that should make him eminent, thus leads a life of indolence and ease.

Luby passed the last holidays with me; the same good-natured, jovial fellow, dry and mirth-provoking as ever, with his comical stories and witty sayings; my sides ache even now when I think of him. He is down in Alabama, and a late letter from him tells me that he has plenty to do at his trade, besides several orders for portraits, so that he makes it pay as far as "*mon.*" goes. He hints occasionally that he is tired of continual roving, and speaks about the comforts of a home so often that I hope to have him for a neighbor ere long.

Night has wrapt the earth in its sombre folds; the coals in the grate burn brightly, for the night air is chilly; and the lamp sheds a soft, brilliant light over these pages as I write.——Listen! A sweet voice, clear and full of exquisite melody, comes from the next room, and dropping my pen I hear these lines sung:—

LET others prove false, I am ever the same,
Though misfortune may blight and dishonor thy name,
Though friends may desert thee—thy foes may assail—
The venom of slander against thee prevail;
Thy pathway may lead amidst darkness and gloom,
'Mid thorns of affliction, where roses should bloom—
Through all I will follow, my lot with thine cast,
'Mid troubles and trials, unchanged to the last.

It was not for wealth that I gave thee my hand,
For station or honor, for houses or land;
But instead, 'twas as pure and as holy a love
As ever descended from heaven above—
To cheer us in darkness, to guide us in bliss,
To a world in the future more happy than this;
And now where thou goest, wherever you rove,
I'll follow, thou knowest—'tis only for love.

My dear widowed mother, I leave her for thee;
My fondly lov'd brother,—the wide-spreading tree,
Where in childhood we played; how strange it appears
As I bid them adieu, to be severed for years,
To wander 'mong strangers, and meet their cold gaze,
Afar from the scenes of my youth's happy days!
Tho' sad are the thoughts, yet no sorrowful tear
Will spring from my heart if thou art but near.

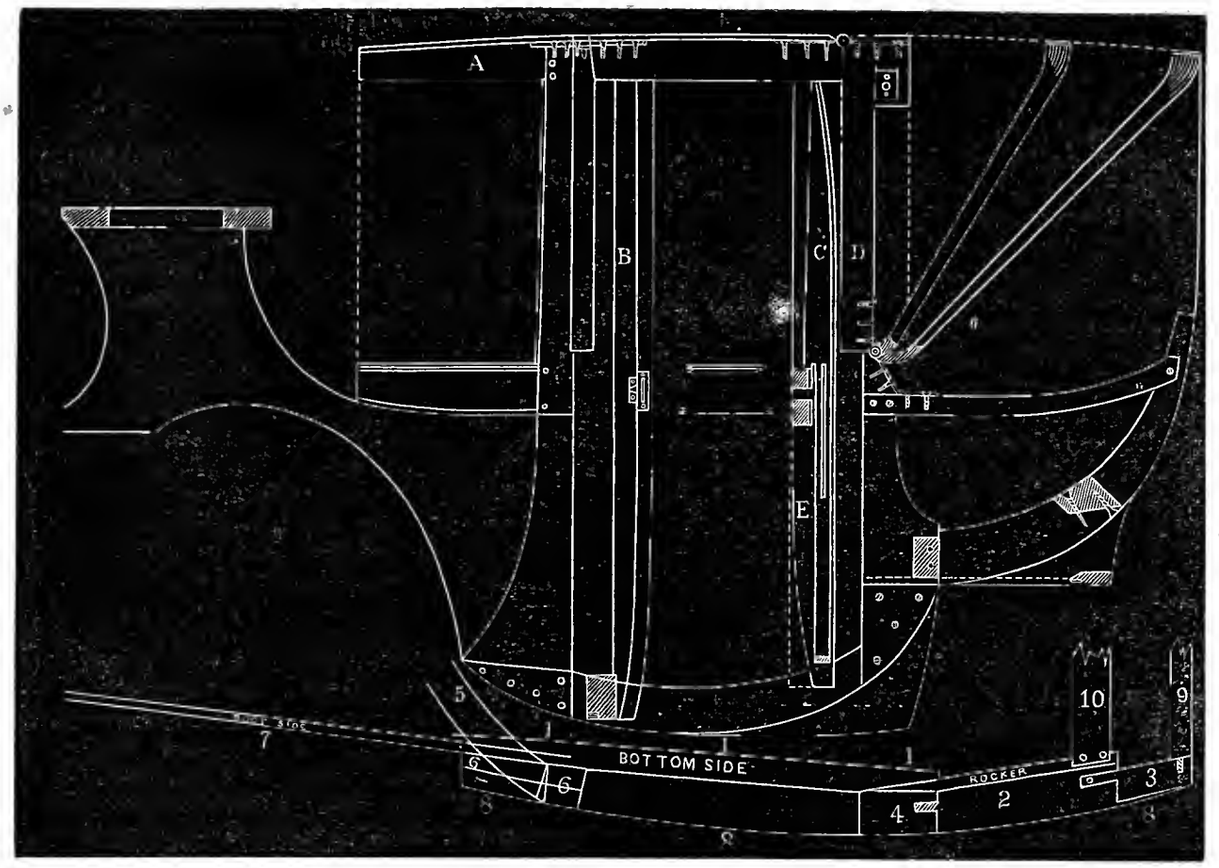
And now, in the future, whatever thy fate,
Surrounded by friends, or encircled by hate,
Thy destiny—dark as the storm-clouded night,
Or fair as the star-spangled sky, and as bright—
No matter to me what may hover above,
No change can it make in my soul-burning love;
But all through the future, 'till life shall have passed,
Ever faithful I'll prove, unchanged to the last.

The song is ended, but the music still lingers in my soul, where it thrills the sensitive cords of melody, as though an angel hand had swept across the strings. I have before said that music had power to move me to tears, and even now, as that sweet voice seems to fill the room with charming echoes, a tear trembles on my eyelid and courses slowly down my cheek, and a small, white arm encircles my neck; soft, dove-like eyes look up in mine, and I hear a voice, the same that was singing a moment ago, but now softer and sweeter and more musical to my ear. I hear it whisper,—"Dearest, why that tear?—are you unhappy?" Bending over her, I reply,—"'Tis a tear of joy, Thalia, to think how happy I am in your pure and holy love."

"It is woman's destiny to love," she answers, and the tear is kissed away, while in her upturned eyes I can see, mirrored from the very depths of her soul, a love as deep as ever, welled up from the heart's fountain, to bless man in life's journey.

The dreams of my youth are more than realized. Farewell!

A SAILING CARRIAGE.—A curious experiment was made, a short time ago, on the canal at Antwerp. A vehicle rigged out with sails was propelled by the winds on the ice, and the trial is stated to have been entirely successful. Why has not something of this kind been attempted on our large rivers? Yankees should not be outdone.



AN ENGLISH BROUGHAM LANDAULETTE.—$\frac{3}{4}$ IN. SCALE.

ENGLISH CARRIAGE ARCHITECTURE.—No. X.

In laying down this draft on the cant-board, commence by making a straight line about four inches from the edge; then having your side-view drawing, mark off the lengths, doors and back corner pillars, with square lines. Having the width of the front and back seats, and the width of the back and front of the body, imagine the line drawn to be the inside of the standing pillars, being the extent of the widest seat; then divide off from that line the width of the back and front; next, mark off the thickness of the standing pillar outside of the seat-line, then strike the compass-line, 8, 8, 8, from the toe of the chariot pillar, through the point indicated by figure 4, to the corner pillar 9. In order to mark the inside of the corner pillar, measure how much the back standing pillar turns under at the square line of the corner pillar joint, and add to the thickness of the corner, which will give the point marked 3, then allow for the thickness of the pump-handle, or stay, and draw your inside line to the pillar marked 4, which will give the bevel of the bottom side.

A, shows the stationary front; B, the front pillar; C and D, the pillar tops; E, the door pillar. On the cant, 1, 1, 1, shows the inside of the bottom side; 2, the short bottom side; 3, the back corner pillar; 4, the standing pillar; 5, a section of the round fixed front; 6, 6, the front pillar; 7, the front boot side; 8, 8, 8, the outside line of the body; 9, 9, shows the deep back rail; 10 the hind rail.—*Carriage-Builders' Art Journal.*

As lessons for study, these examples will prove of some value, although the English system of framing in some of its details will not meet with much favor from American Coach-makers. It however is no part of our design to criticise, but to present the drawings as we find them, leaving our readers to form their own opinions. In our next volume, we shall continue to present the reader with such diagrams of English carriage architecture as we may judge to be of interest, under the impression that, by studying them attentively, our subscribers will be benefited. Among these will be introduced what our London cotemporary calls a "Miniature Brougham," and the "Canoe Barouche."

For the New York Coach-maker's Magazine.

SIFTINGS FROM THE DIARY OF A COACH-MAKER.

(*Concluded from page* 208.)

CHAPTER VII.

The soft, life-giving breath of early spring was fast tempering to geniality the rough winds of March, when, one morning, a negro boy handed me a delicately-penned note, informing Messrs. Bradly and Burnet that Miss Ellen Edridge had arrived, and would be "at home" at the residence of Mrs. Gay that evening. The perfumed missive bore the signature of Maggie Gay; and, as I mentally pronounced that name, I was forced to smile at the increased rapidity with which my heart beat against my vest. It was no new sensation; Oh, no! my heart and I had discussed the matter long ago; and I had very willingly concluded not to throw any prudential obstacles in the way of its pulsations. As I have before intimated, my nature is a buoyant one, so I was not filled with any very serious mental tribulations at the discovery that Maggie Gay was very dear to me; but I didn't commit the absurd folly of telling her so at once; no, indeed; I knew the little witch too well for that. My only anxiety was to render myself as necessary to *her* happiness as possible; to master the defences of her heart's citadel first, and, then, seize the first favorable opportunity to carry it by storm. Perhaps I did her injustice in being thus cautious; but of that we shall see hereafter. It is true, we occupied positions in society widely separated,

according to the opinions of certain people; but, I would here say, to *certain people*, that I don't care a fig for their opinions. Though Maggie Gay was the child of wealthy parents, and her father had been a lawyer, an eminent and good man, I considered myself her equal, or that of any one else who has an honest heart and fears God; and I would further say to all who are not conscious of possessing those attributes, that I belong to a higher caste than them, so they must not venture on familiarities if they do not want to get snubbed. This is not a mere ebullition of spleen, but the result of deliberate conviction based upon observations of men and manners; or, to be plain, I have in my intercourse with the world encountered so many heartless, brainless, unmitigated *blatherskites*, of both sexes, who considered that they were the very best variety of "pumpkins," merely because a generous Providence, in consideration of the fact that they didn't know enough to earn their own bread, had provided them with rich progenitors. I have, I say, encountered so many such, that I think myself *better* than a wealthy man or woman, *unless* they possess a moderate quantity of brains, and are not habitual liars, hypocrites, and snobs. That is my creed with regard to social distinctions; and if Maggie Gay had turned up her pretty nose at me merely because I earned my own bread, I would have cut her acquaintance without a pang, save regret that so fair a casket contained so worthless a jewel.

Upon reaching the Gay mansion we were ushered into the parlor, where we found the ladies and warm smiles of welcome. Miss Edridge advanced with both hands outstretched to greet us; and, when I looked into her eyes and saw the wealth of kindly feeling that shone there, I could not doubt that the outspoken, artless warmth of our reception was sincere. Oh, that I had such a sister! I thought, and a tear gathered in my eye for a gentle little maiden who sleeps under a modest marble-slab in a far distant grave-yard.

"Miss Edridge," said Henry, after the first salutations were over, I trust you will pardon me for the want of gallantry I displayed during the time we were together after the wreck. Circumstances of a painful nature forbade me from holding any intercourse with John Burnet, and to this, and this only, you must attribute my rudeness."

"Mr. Burnet has often spoken of you lately as his nephew," replied the lady, "and seems to regret exceedingly the cause, whatever it may be, of his estrangement from your family. After we learned who you were, and that ill-feeling existed between you, we did not think your conduct strange, and only remembered the noble service you performed in saving us from a dreadful death. The fact that I owe you the life of my dear mother, would cover far more serious faults than mere lack of gallantry. I know Mr. Burnet's grasping nature," she added, "and so do all who are here; so I may speak of him freely without transcending the bounds of propriety. I feel sure that the wrong he has done your family is of a pecuniary character, and, from his present state of mind, I think he would willingly make restitution. Now, do not, I beg of you, understand me as wishing to pry into this matter; I merely throw out this suggestion for your benefit in case my conjecture as to the nature of the matter is correct."

"It is too late now," said Henry sadly. "Reparation cannot be made *here* save by repentance, contrition, and prayer. My father, whose life this man embittered, is now, I trust, in heaven, and my dear, old mother needs nothing these hands of mine can't furnish, so he can keep his money—his and *mine*."

There were tears in two pairs of soft eyes when he concluded, and Maggie said quite savagely,

"If he was my step-father, I'd give him no peace until he righted this wrong; indeed I wouldn't."

"I have no influence with mine," rejoined Miss Edridge; "but this is a gloomy subject; let us drop it."

"And talk about the grand party at Bright's," cried Maggie, brightening up, and shaking back her curls. "Oh, Ellen! you ought to have been here—such fun as we had! and you just ought to have seen Mr. Bradly dancing the Virginia reel; oh, it was great! wasn't it, Mr. Burnet?"

"I rather think Mr. Oversmasher regarded it as the most *striking* event of the season," said Henry, smiling.

"Yes," cried Maggie, merrily; "he will stand clear of Mr. Bradly next time he tries that *butting* step."

The conversation, once turned into this pleasant channel, flowed on in sparkling eddies; and, when topics grew threadbare, music was introduced to fill up. It was the happiest evening I had spent for many years; and when the ladies bade us good-night, and Maggie presented her hand at parting, I forgot myself so far as to give it a squeeze that suffused her face with blushes, and sent her roguish eyes to the floor. For a moment I feared that I had given offence; but there was no anger in her hearty good-night, and cordial invitation to "call often—very often." We did call very often; and, though other visitors were generally present, we could not but see that we were favored guests.

One morning, about the middle of April, Sam returned from the post-office, and laid a letter on my bench, saying,

"Is dis fo' you, or Mista Burnet? Dis chile dunno much 'bout 'ritin', no how, dough I knows s' printed littas fust rate."

I looked at the superscription, and saw that it was for Henry; so I handed it to him. He broke the seal, and, glancing at the bottom of the page, uttered an exclamation of surprise; and I saw that, as he read, his face assumed a troubled look. When he had finished, he handed it to me, and asked me to read. I glanced at the signature; it was from John Burnet; and ran as follows:

SIR,—I am dying. I feel that my days are drawing to a close; and the thought sends terror to my soul. As you hope for mercy hereafter, come to me. I have much to say to you, and much to ask of you—oh, how much! Do not, I implore you, fail me. Your presence will lift a vast, unbearable weight from my mind, and smooth my passage to eternity. I know you cannot refuse me this, much as I have injured you and yours. You are too noble to let your just anger follow me to the grave. Come with all possible speed, for I grow very, very feeble.

Bring Miss Edridge with you; her mother desires it.

Your unworthy, but repentant, uncle,

JOHN BURNET.

"Well, Paul," said Henry, when I had finished, "how am I to reach there in the shortest possible time?—for I must go; it is nothing but right, as a Christian man, that I should."

"Certainly—go, by all means! Take a pair of horses and a buggy; it is only forty or fifty miles, and, by starting now, you may get there before dark. Miss Edridge ought to be informed of this immediately, so as to give her time for preparation."

"Yes, you are right; I will send a note enclosing this

letter, and then make my arrangements to start as speedily as may be. Fifty miles! why I will have to kill the horses to get there before night; it is too much for them."

In two hours Henry, accompanied by Miss Edridge, drove out of town behind a pair of mettlesome greys—the property of Mr. Bright, who kindly insisted on his using them in preference to a team from the livery stable.

In a week from the time of his departure he wrote to me that his uncle was sinking slowly, but surely. A severe cold, contracted at the time of the wreck, had fastened on his lungs, and violent inflammation, a hacking cough, and other symptoms of rapid consumption, heralded a speedy dissolution. The wretched old man expressed the deepest contrition and regret for the great wrong his inordinate love of money had impelled him to do his brother; and said that his will, when read, would show that he had made all the reparation in his power. He had asked and obtained the pardon of his nephew, and, daily, almost hourly, craved in earnest supplication, the forgiveness of his Maker. The ladies displayed the warmest feelings towards my friend—Miss Ellen, especially, was mentioned in terms that spoke of a stronger interest in that lady than mere friendship.

Two weeks later I received another letter, stating that all was over—the spirit of John Burnet had fled, and grass grew on his grave. Thirty thousand dollars in cash and stocks was willed to Henry; and the balance of the estate, worth a similar sum, to the widow. "I will be with you in a few days," wrote my friend, "and, as I start for my native State as soon as possible, I want you to prepare to accompany me. You *must* go, for it is part of the programme I have laid down, and it can't be changed; remember that, and be prepared. I will listen to no refusal. I will explain further when I see you."

That night I called to see Maggie Gay, and handed her my friend's letter; for, be it remembered, she had as deep an interest in the demise of John Burnet as I had; he was her friend's step-father. We were alone, and as she read, my eyes dwelt in silent adoration on her fair face, without fear of detection. Perhaps I ought to have been ashamed to thus take advantage of her pre-occupation; but I wasn't—caution was my policy. As her eyes neared the bottom of the page, I was surprised to see that the color suddenly left her cheeks, and a tremor shook her whole frame. What could it mean? I withdrew my eyes, and fastened them on a picture over the mantlepiece.

"So, you are to leave us, too," she said, in an unsteady voice, as she handed me the letter.

The words sent a strange thrill to my heart, and I almost started from my seat as she uttered them. Why did she speak of my probable departure *first*, when the letter contained news of such grave import? There was but one answer; and, while I trembled with joy at its significance, I almost feared to entertain it—it seemed too full a realization of my brightest dreams of happiness to be true.

"Henry insists upon it," I ventured after a short pause, "and it is pleasant, you know, to revisit the scenes of one's childhood, and clasp anew the hands of one's friends, after a long separation."

I said this in a steady tone, but without daring to look at her.

"Yes," she replied, "it is pleasant, truly; but have you no regrets for the friends you will leave behind you here? I am sure we will be sorry to lose you just as we have learned to know you and appreciate your worth. It is not likely that you will return, is it?"

"In any case, I can never forget my kind friends in Alabama," I answered, in a voice that alarmed me, for it was terribly shaky in spite of all my efforts to appear cool. On looking in her face, I found that she was regarding me with a look of sorrowful earnestness; and again my heart beat faster, and hope grew brighter and stronger.

"*One* of them, at least, will always remember you," she rejoined warmly; "I am slow to make friends, and, therefore, loth to part with them. Save Ellen and yourself, there are few, outside of my own family, that I can call friends, in the full meaning of that term; so you must not think it unwomanly when I say that the separation will be painful to me."

O, how I despised myself for the cowardly suspicions that had restrained my tongue when that frank, open avowal fell from her lips! True, she only spoke of friendship; but why did she not mention the name of Henry Burnet in that connection? It was the first distinction she had ever made between us, and why was it made? And, then, had she not, on a former occasion, told me that Ellen Edridge was, next to her mother, the dearest friend she had on earth. I had seen the tender attachment that existed between them, and to be told that I occupied a similar niche in her inner heart, was joy indeed.

"I thank you, Maggie; I thank you for what you have said. But you only give me a secondary place in your heart, whereas I give you the very first in mine. Is this fair," I added, taking her hands in mine, and looking into her eyes, "is it fair; can I not prevail on you to do me justice—to give me a fair exchange? Say, Maggie, may I hope for this?

Her face was very pale; her lips quivered, and tears were welling out from under her long eye-lashes, as she murmured, in broken accents,

"Mr. Bradly—Paul, I will not say that your meaning is not understood; but—but, do you really mean this? You are not jesting with me, are you? They who do not know me call me a flirt; but, on my soul! I have never trifled with so serious a thing as love; never, Paul, never."

"Jesting, Maggie? jest with a subject so near my heart? Oh, no! I love you, Maggie; love you dearly! Will you, can you love me in return?"

"Yes," she answered, smiling sweetly through her tears, "I do love you, and always will! Oh, Paul! you can never know how I have struggled with this new and all-absorbing affection of my heart; I strove, even while my truant heart was full of its self-created bliss, to check this outgoing of my feelings towards you, for I feared you might think me the heartless thing some say I am—I feared"—

"Hush, Maggie," I said, drawing her head down upon my bosom; "I have, all along, studied your very thoughts, and know you for a true-hearted woman, so, say no more about it. Kiss me, dear Maggie, and tell me again that you love me, for I am so happy that I almost fear I am only dreaming."

* * * * * *

"So you are determined not to go with me?" said Henry, on the evening of his return to Tireville.

"Fully determined," I answered.

"But what are your plans for the future?—I don't want them to conflict with mine; for you must know, Paul, I have laid out plans for us both, and I hate to have them spoiled."

"And what are those plans, Henry?"

"Well," said he, coloring deeply, "I'm going to get married in six months, and"—

"So far we agree," I remarked, interrupting him, "for so am I!"

"Eh! you—*married!* To whom?

"Maggie Gay."

"No!—well! if that aint the best news I've heard lately. Give me your hand, Paul, for, through our wives, our friendship will last forever,—Ellen has promised to be mine!"

"Then I congratulate you with all my heart; for, next to Maggie, she would have been my choice. She is a noble woman!"

"She is that—but now for my plans. You know that Bright wants to sell out here, and buy a cotton plantation? Well, I spoke to him to-day about you and I becoming purchasers, and he offered us the shop and stock at a great bargain; so I told him we would take it."

"But," said I, in astonishment, "you know that"—

"There, there, that will do on that string! I intend to do nothing for you, Paul, that you have not already done for me—on a smaller scale, it is true, but the will was the same—so not another word of objection. I'm going North to see my mother, and, if possible, bring her with me; and, while I am there, I want to purchase stock for the shop; so you *must* go with me."

I went.

In six months we were married; and better wives than those of Messrs. Burnet & Bradly, carriage-makers, Tireville, Ala., are not to be found under the sun. There is only one drawback to our felicity, and that is not a serious one—it is this: There are three grandmothers, two of whom belong to Henry's establishment, and one to mine. Now, the latter has got it into her head that the Bradly baby is the handsomest, and utterly refuses to be convinced to the contrary, though the "grandmas" of the Burnet family obstinately dispute the fact, and declare positively that their baby bears off the palm of beauty by odds—and so they have it, up and down.

Horn recovered from his wounds, and went to New Orleans, where he was killed in a street-fight. Bob Gay has been admitted to the bar, and has made his mark as a promising "limb of the law." Oversmasher is in Louisville, Ky.; and Bright is raising cotton on the Tombigbee. "The Alabama Carriage Factory" continues to be a flourishing institution; and I often bless the day on which I shook the dust of Cincinnati from my shoes, rather than work for nothing and board myself.

SUCCESSFUL CARRIAGE-MAKERS.—Notwithstanding the general depression in business among the craft, we are gratified to find that the enterprising firm of Brewster & Co., in Broome street, this city, have more orders in hand this season than they have ever had in any previous one. By the way, this firm have just turned out a fine hammer-cloth seat coach for presentation to the lady of the President, ordered by a committee which presents it, at a cost of $1,500. The interior trimmings are fine brocatelle.

For the New York Coach-maker's Magazine.

THE PARTING.

BY ANNIE M. BEACH.

I AM going far away, Ellen,
To the land beyond the sea;
But I'll not forget the olden time,
My pleasant home, nor thee.

They say there's land for all, Ellen,
In the distant untrod West,
And I go to seek a home there
For the one I love the best.

And tell me, dearest, Ellen,
Far, far across the tide,
When the home I seek is ready
Will you come and be my bride?

I know your answer, dearest;
Adieu,—remember me;
May the angels guard my Ellen
Till we meet beyond the sea!

CAMBRIA, N. Y., *March*, 1861.

Pen Illustrations of the Drafts.

LADY'S PARK PHAETON.

Illustrated on Plate XL.

WE are under obligations to our friends, Messrs. Hooper & Co., Haymarket, London, for the sketch from which this draft of a Phaeton is taken. The model of the body is similar to the one called the Victoria Phaeton, exhibited at the Crystal Palace, London, ten years ago. In this example the carriage is hung on C springs front and back, in order to do which the builder is obliged to introduce a perch. This, our correspondents write us, is a very fashionable carriage in London at the present time. The rumble at the back is designed for a servant, and is decidedly a European "Institution." These low-hanging carriages are peculiarly adapted to the conveniences of Ladies, as the ascent is very easy, and would make a pretty thing for use in our Central Park, could American tastes be satisfied with them.

LIGHT CRANE-NECK PHAETON.

Illustrated on Plate XLI.

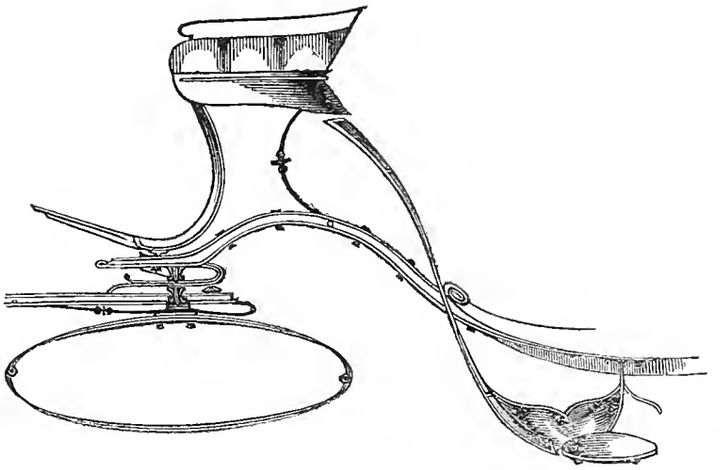
WE present this to our readers as another original design. It will make a very light and pretty vehicle, just suited to the tastes of many American customers, and it may be built at much less expense than some others of its class, with dickey seats.

UNION BUGGY.

Illustrated on Plate XLII.

THERE are many novel and original features in this drawing; not only in the sweeps or lines, but in the peculiarly shaped back-corners. The seat is intended for French imitation of basket-work panels, but of course can be changed to a stick-seat, at the option of the build-

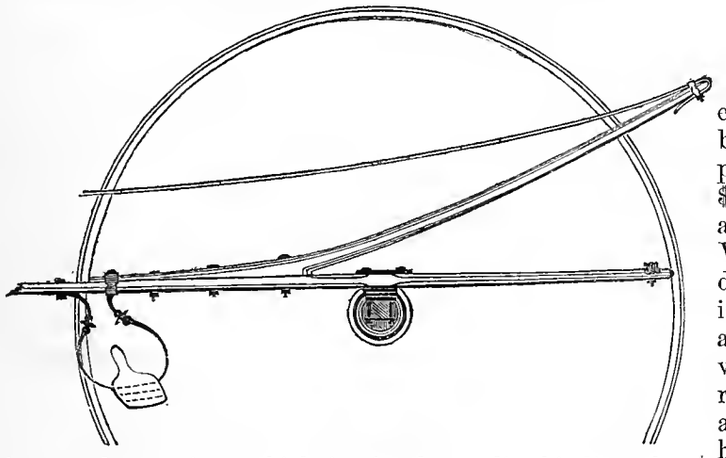
er. In this design we have made an application to the side-spring of the band and socket in hanging off the body, an enlarged view of which will be found in this column, below. In our next No., being No. 1, Vol. IV., we design to present our new subscribers with two designs for buggies, worth to them more than the cost of an entire year's subscription. Renew your subscriptions and prove what we assert.



Sparks from the Anvil.

SECTIONAL CARRIAGE-PART OF A BOSTON GIG.

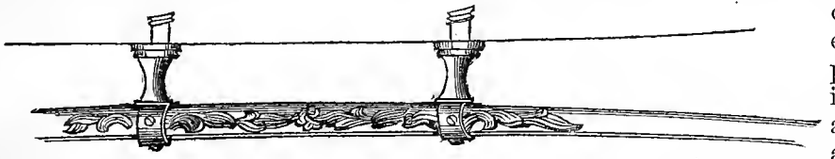
The chief novelty in this design will be found in the manner of securing the step to the shaft and heel-point of



the wooden spring, which is simply a clip binding the two together.

SIDE-SPRINGS SECURED BY BAND AND SOCKET.

Instead of a carved block or projection on the spring, as usual, we think an iron band fitted around the side-



spring and secured to the same with a screw, with a cast-iron socket slipped on to the bolt as shown in the engraving, would, on account of its novelty, look well.

MOVABLE DICKEY-SEAT AND COMBINATION CRANE-NECK BODY-LOOP.

In this design, the common solid iron loop, or crane-neck, is supplied with a substitute of bent timber, and plated with iron on the top and bottom, after the French manner. This mode of finishing a carriage will allow of the dickey-seat being readily detached, for convenience in shipment, the seat-stay being secured at the bottom to the combined-loop and the heel-board to the block of the fore-carriage. This is a decided novelty.

THE EFFECTS OF THE NEW TARIFF ON IRON AND STEEL.

First, on Iron.—At present prices in England, the increased duty on common English (or Welsh) bars will be about $7 per ton (present duty, $7 68—new duty, $15 per ton); rails, $8 per ton (present duty, $6 72—new duty $15); refined English bars (Staffordshire) are advanced about $6 per ton (present duty, $9 12—new duty, $15). Whether these advanced costs will lead to an immediate diminution of importations from England is doubtful, as it is probable the English will not yield the field without a severe struggle, and there is reason to suppose that they will submit to a reduction of £1 sterling per ton, at least, rather than give up the American market. Certain brands and kinds of English, however, will always be wanted here, no matter to what point prices may go. The duty on common Swedes is increased only about $2 per ton, while on fine Norway iron the duty remains about the same as under the present tariff. This quality, however, does not enter largely into competition with American iron, being unrivaled in quality, and indispensable for horse-nails and other fine purposes.

Second, on Steel.—The increased duty is very onerous, and has occasioned a great deal of complaint on the part of the consumers in this country. On the lower grades, used for agricultural tools and other purposes, the increased duty is almost prohibitory; say, for instance, on coach-spring, sleigh, and horse-shoe steel, the advanced duty will be about $25 per ton! On the finest grade of cast-steel, the increase will be about $22 per ton, which, considering that this quality is not made here to any considerable extent (it is claimed that it *cannot* be made here at all), and that it is indispensable for axes, edge tools, &c., &c., seems quite unwarrantable. The *general effect* on steel will be to virtually shut out the lower grades, and thus diminish revenue, while the cost of the higher grades will probably be enhanced to the consumer to the full extent of the increased duty.—*World.*

"Sparks" for the Fourth Volume.—We contemplate making this department of our journal very interesting and useful to the carriage-smith during the coming year.

Paint Room.

For the New York Coach-maker's Magazine.

LESSONS IN PRACTICAL COACH-PAINTING.

BY F. W. BACON.

LESSON IV.—VARNISHING.

NOTWITHSTANDING so much has been said and written concerning the subject of varnish and varnishing, we find more painters who fail in this particular branch than in any other. And why is it? In fact, there are so many reasons for this, that I shall not attempt to solve any of them at present, but simply give my own views of the manner of varnishing, which I consider correct.

A first and very essential point is a clean room. Your room should be well swept, dusted, and sprinkled two or three hours before varnishing, and the floor well sprinkled again just before varnishing. Some pretend to tell the exact temperature required, which must be regulated to a certain degree of Fahrenheit, &c. Now, the most suitable temperature I can get, is when I can comfortably stay in any part of the room, with coat off and sleeves rolled up ready for work. Beyond all things, avoid varnishing in a cool room, and then heating it. The varnish treated in this way will certainly "*melt and sag.*"

If the varnish is too thick, it may be warmed a little, or thinned with equal parts of oil and turpentine. Lay on the varnish as evenly as convenient. Then lay it off crosswise; then diagonally and cross it; then cross the work; and lastly, lengthwise, with a light, quick stroke. Take especial pains not to let the varnish settle in the corners of the mouldings, &c.

BRUSHES.

The flat hog-hair brushes, I think, are preferable for large surfaces; but in using them beginners are apt to condemn them, because they are liable to get on too much varnish. Great care should at first be taken to avoid this. Brushes, when not in use, should be suspended on a wire, in the same varnish that they are employed in; raw oil, however, may be added, to keep the varnish from "gumming" on the brush. They should be kept in a closely-shut box or cupboard, and when required for use, cleaned in clear turpentine, and whipped as dry as convenient. Never put a coat of varnish over another till it is thoroughly dry and hard.

In the next article I shall offer some hints on striping, &c.

CLEANING PAINT PREVIOUS TO VARNISHING.

BY some mistake, this article was only partially given in our March number. We give it here complete.

Provide a plate, with some of the best whiting to be found in the market, and have ready some clean warm water and a piece of flannel, which dip into the water and squeeze nearly dry; then take as much whiting as will adhere to it; apply it to the painted surface, when a little rubbing will instantly remove any dirt or grease; after which, wash the part well with clean water, rubbing it dry with a soft cloth or chamois. Paint thus cleaned looks as well as when first laid on, without any injury to the most delicate colors. It is far better than cleaning it with soap, and does not require more than half the time usually employed with that article in cleaning.

ORNAMENTAL DESIGN.

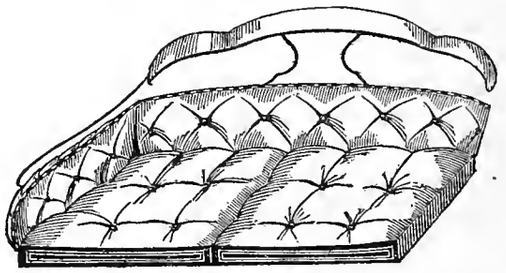
WE intend to leave our "brother brush" to carry out his own fancy in painting this design. Probably he will

thus be able to suit himself—which, should he succeed in doing, would be more than every one has accomplished—and prove him to be *a genius*, at least.

Trimming Room.

DESIGN FOR LINING A PANEL SEAT.

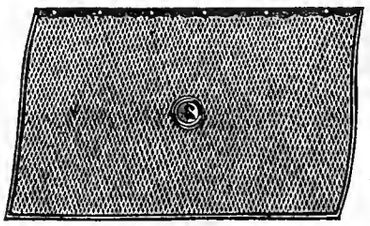
THIS example is a very plain one, with the squab in diamond form, making a plain job, but very comfortable



for the occupant. The edge of the seat is designed to be finished with a roll, as shown in the engraving.

DESIGN FOR A SEAT-FALL.

FOR the lightest kind of trotting wagons this will make a very pretty finish. It is made from enameled or patent



leather, in one piece, and with a raised-edged seam, and all the ornamental work is done with the "tickler," except the central figure; this may have a stitched central piece or a piece of silver or gold-bronzed enameled leather inserted, according to the tastes of the workman or demand of the market. At the top will be seen the valance, made of patent leather, "scalloped," and stitched at the lower edge.

ENGLISH CARRIAGE LACES.

With coach lace, as with many other articles, such as velvet and cloth, where a combination of materials is used, and when the ground-work is mainly concealed, it is comparatively easy for the skilled and ingenious workman to produce an article very attractive to the eye, but of little substantial value. The materials used in the manufacture of lace are wool (which is spun into worsted yarn), fine-dyed linen thread, and silk of two kinds; that used for the weft being of a very fine kind, called Tram, generally Chinese or Italian, and that of the warp, the part which binds the weft, being of a much coarser and stronger description, called Organzine, the whole of the work being bound by another weft, acting almost simultaneously with the first, but formed of two ends of fine, even cotton.

To put what we mean more clearly, we will take silk vellum lace as an example, and show the difference between the manufacture of the best and the inferior kinds.

The best silk vellum laces are made from the best worsted, dyed with the fastest and best dyes; the ground being of the best linen thread; the warp or binder, that binds the silk ground, of very fine-twisted or organzine silk, and the weft of fine-wove silk, of a sufficient number of ends to thoroughly cover the warp, and to produce a rich appearance where the silk shows. The cotton second weft should consist of two threads of fine, even cotton, so that it will allow the figure of the lace to be struck-up about twenty-two wires to the inch. The edges should be of solid silk twist, and the whole of the warp should be passed through a reed or slay with nineteen openings to the inch across the lace.

In the manufacture of inferior work very different materials and much less labor are employed. The commonest worsted and dyes, which will not retain their color, are purchased at a cheap rate; the material for the ground is of cotton instead of linen thread; the warp or binder is also of cotton, with a temporary gloss to imitate silk, which speedily wears off and leaves a number of faded stripes along the whole length of the lace trimming, to the great disfigurement of the carriage in which it has been used. The weft is of coarse and uneven silk, known as floss, which soon turns rusty, and gives to the lace a rough, woolly appearance. The second weft consists of about five ends of coarse, uneven cotton, which prevents the figure of the lace being what is termed "struck-up" more than about sixteen or seventeen wires to the inch, thus materially diminishing the time and labor consumed in the manufacture. The edges, instead of being made of silk twist, are made of cotton slightly covered with silk, while the slay through which the warp is passed has two or three wires less to the inch than superior work. This is another reason why the second weft must, in the case of inferior lace, consist of so many threads of cotton; there are so many wires less to the inch the way of the figure, and so many threads less across the lace; it must therefore be filled out, and so a temporary substance is given by means of an additional quantity of cotton. Some of these remarks apply with equal force to all worsted laces, whether seamings, pastings, or bindings.

The ground or cafoi of worsted laces should consist of at least four threads of worsted, whereas the inferior very often only consists of two threads, and those sometimes of cotton. It is an established fact that a good worsted ground or cafoi lace will wear out a succession of several inferior laces, will always look better, and can be produced at a less price.

To manufacture good lace skillful artisans must be employed, and they can command, as in other trades, wages varying, according to the skill of the workman, from 15*s.* ($3.45) to 35*s.* ($8.05) per week. We place before our readers a tabular statement, showing at a glance the difference in the manufacture of best and inferior laces:

	BEST.	INFERIOR.
To make one yard of vellum lace, the shuttle must pass through the lace....	3,168 times.	2,408 times.
The wire must be drawn out and put in.	1,584 "	1,204 "
Causing the feet to tread the treadle....	3,960 "	3,010 "
The pattern to be pushed back by the hand.....	3,960 "	3,010 "
Total number of actions made by the hands and feet to produce one yard of lace.....	12,572 "	9,632 "

There is, therefore, according to this calculation, which we give on the authority of an experienced practical laceman, no less than 2,940 more actions by the hands and feet required to produce a yard of best lace than is necessary in the manufacture of a yard of inferior quality.

Again, in weaving the best lace, the workman is not allowed to pass over any perceptible defect, while in the case of inferior work such defects are passed over with impunity. The profits of the manufacture of inferior lace are also considerably in advance of those made upon the best article; but the cost of the former to the coach-maker is not commensurately diminished, while the injury to a good carriage by its employment is often such as materially to damage the reputation of the builder, and seriously to disfigure what would otherwise be an excellent specimen of workmanship.—*Carriage-Builder's Art Journal.*

For the New York Coach-maker's Magazine.

TIMBER MARKED BY PATTERN ON BOTH SIDES.

It is a much shorter way to have a piece of timber marked off on the front and opposite sides when dressing it up, than to only mark it off on one side and dress it from that by the try-square. For instance, take a piece of timber for an arm rail, or any crooked part for a heavy coach, as it comes to you sawed out, and mark out the face side to your pattern. Should you wish before putting your work together to have the part either square or beveled, as the case may be, then mark your pattern in three places at one side, and also the upper line of the mark, and dress them up square at these points. Next, take your pattern and lay it exactly at the opposite side, after you have squared the three marks, over the top of the working piece. In this way you are sure your pattern will lay on not only square, but exactly alike on both sides, and you can dress up a piece of stuff much quicker by following the mark; the more so, as you have a part of it squared off when you begin, and need only to shave the remaining portion off. You will find this a great saving of time, especially with long pieces, as bottom sides, standing pillars, top rails, &c. Chip.

Confession of a fault makes half amends.

The New York Coach-Maker's Magazine.

MAY 1, 1861.

E. M. STRATTON, Editor.

TO READERS AND CORRESPONDENTS.

RENEW YOUR SUBSCRIPTIONS.—*Our present subscribers will please bear in mind that our rule is to stop the Magazine when the year expires, unless they renew by sending us the payment* IN ADVANCE. *To secure a complete series, therefore, our friends will see the necessity of being prompt, for we intend to regulate our edition of the* FOURTH VOLUME *as near the wants of the craft as is possible. Western bank-bills and Canadian money, or post-office stamps, will be received at par. Subscribers in the British Provinces must remit twenty-five cents extra, to prepay postage for the year. Register your money-letters.*

BOUND VOLUMES *of this work are sold, singly, for $3.50 per vol., or Vols. I., II., and III., when purchased together, for $9.00. The three volumes, bound (including the subscription for the fourth year), will be furnished for $11.50. The three volumes, in numbers, will be sent for $8, when ordered. Single volumes, in numbers, will be sold for $3, or any single number for 25 cents.*

COVERS, *handsomely gilt, and ready for binding the numbers therein (which any binder will do for 25 cts.), can be had at this office for 44 cents. When mailed (the postage on which we prepay), 55 cents. Any volumes left with us will be bound for 75 cents each in our uniform style.*

OUR TRAVELING AGENTS.—*Mr. John Hewlett, of Toronto, is the only authorized agent we have in Canada West. Mr. Hiram Mills has the agency of this Magazine for Lewis County, N. Y. Mr. Matthew G. Peck, Jefferson County and some others.*

☞ *All letters directed to this office on business* NOT *relating to the Magazine, but solely for the writer's benefit, must inclose a stamp; if requiring an answer, two red stamps. Orders for a specimen number must be accompanied with nine three-cent stamps. When these terms are* NOT *complied with, no attention will be given them.*

END OF THE THIRD VOLUME.

THIS number will complete the Third Volume of this Magazine, and close the subscription term of the larger proportion of its generous patrons. We wish these facts to be distinctly impressed upon the minds of our friends: that at the end of the volume we have always made it the rule, to lay aside our old subscription book, and begin again, by recording in the new one *only* such names as are sent in with the cash in advance, according to the usual custom. There are two good reasons for this: one, that we do not intend *to force* anybody to continue their subscriptions, and the other, *that we do not intend to furnish our Magazine "free gratis, for nothing."* It will thus be understood that, to be a longer subscriber, requires that payment for a year *in advance* be made. We recommend that this be attended to early, so that the regular monthly visits of our journal may not be intermitted. At the special request of some of our "old and tried" subscribers, we have appended to their names in our old book, "to continue on." These will receive the first number of the new volume, but we hope they too will send in their subscription money without further notice, and suffer nothing to mar that amicable relation in which both parties stand with each other. We can assure you that no Editor can handle his pen so well as when he has a whole coat to his back and a full purse in his pocket.

We are aware that the times with Coach-makers are very "flat,"—more so at present in the larger manufacturing cities than at any period since this enterprise was undertaken; but there are hundreds of country village carriage-makers, surrounded by rural and industrious neighbors, who will be but slightly affected by the "distracted state of affairs," which designing politicians have brought upon us. To these (to whom our publication is indispensable) we turn with confidence for patronage the coming year, in the hope that they will not forget us. To the well-wishers of this Magazine we would state, that its circulation is now about as large as at any time during the issues of the two former volumes, but that the first six months of the current year were industriously employed in producing this result. Had the times continued favorable the entire year, this would have been one of great success. We, however, shall enter on the next volume in the hope that its friends will exert themselves to give it a wider circulation than the earlier ones have ever enjoyed.

Our expectations of being able to make the coming volume an interesting and useful one, are very flattering. Among the leading articles, will be a series on "The Rise and Progress of Carriage-making in England," copiously illustrated; two interesting articles by the author of "Clarence Clifford," and articles for the Painter on "Dry-Color Ornamenting." We have already in hand a rich collection of matter adapted to every department of our work; and when we state that the best writers of the past year will continue their contributions, we have said enough to warrant our readers in believing that the coming volume will not suffer in comparison with any that have preceded it. Will our friends please give their subscriptions an early renewal?

PUBLISHER'S BUSINESS NOTICES.

WHO WANTS A COMPLETE SET OF THIS MAGAZINE?—The three volumes of this work, containing over 500 engravings (about 250 of them being the most fashionable carriage drafts extant, all drawn correctly to scale), 700 pages and more of letter-press, with handsome title page and full indexes, can now be had, handsomely bound in muslin, gilt, for $9 00, if purchased at the office, or by mail, with the postage prepaid, for $10 00. Single vols. will be $3 50. The vols. will also be sent to order at office prices, payable on delivery by express, the expenses of delivery being paid by the receiver. These volumes contain a mass of mechanical and literary matter, of the greatest usefulness to Coach-makers, which can be found in no other work. Among others will be found instructions (with diagrams) in drafting carriages to scale; the

French Rule, as it is improperly called, as applicable to American carriages, and some examples in the same line as practiced in England; with instructions in painting, varnishing, and ornamenting carriages. In a word, there is scarcely a single detail in the whole art of carriage-making, that will not be found treated of, in these interesting and practical pages. To the Coach-maker, as a shop-companion, a parlor ornament, or as an addition to his library, a set of this Magazine is invaluable.

BINDING THE MAGAZINE.—We continue to bind the Magazine for 75 cents a volume, in our uniform style. We have on hand a number of volumes bound to the order of our customers, who will please call or send for them soon, or we must sell them to pay our bills. Some of these have been in our possession one and two years. Covers for the different volumes will be furnished as heretofore at 44 cents; by mail, postage paid, 55 cents each. The ordinary charge for binding a volume when you furnish the cover is 25 cents.

THE MAGAZINE IN NUMBERS.—Those wishing the back numbers to complete sets, can have them for 25 cents each, in stamps. A great many persons are in the habit of sending for SPECIMEN NUMBERS, without the pay. Such must not expect to receive them. We insist on the price being enclosed with the order, and should a customer afterwards subscribe to the volume, the amount paid will be deducted. Will our friends please oblige us by impressing this fact upon the minds of others?

THE ADVANTAGES OF TAKING THIS WORK.—All carriage-makers naturally ask, what are the New York fashions? This Magazine regularly taken will answer the question satisfactorily,—much better than you can get them by prying into the city establishments under the pretence of buying carriages, with the risk of being detected, and, perhaps, if not kicked-out, yet insulted. Here you will find designs for all parts of a carriage, costing during the year, to the publisher, much labor and expense—all for the small sum of three dollars. Is it not very pleasant to have such a monthly visitor as ours, making its appearance regularly, and freighted with the experience of some of the best minds among us? Try it a year, and we are certain of your patronage the next.

TO CLUB AGENTS.—There are many friends to this work in different localities, who, with a very little effort on their part, could easily get up a club of subscribers to this Magazine, and very much oblige us, besides securing a copy for themselves, gratis. Some have undertaken to do this after our agents have called—*this is not quite fair*, because we cannot afford to pay them and you too,—which, under such circumstances, we are obliged to do. Let your exertion be given *voluntarily*, then we shall appreciate it, and there will be no intermediate claimant for the reward clearly yours.

TO YOU, EMPLOYERS!—Many of you have apprentices, who need encouragement. Have you ever tried the experiment of making these glad by presenting each with a copy of this work for a year? If not suppose you try it. Our word for it, you will find it as good an investment as can be made of twenty dollars, to send for ten copies.

EXTRA PREMIUMS.—Any one (not a traveling agent) who will send us 20 names, with the money ($40), shall, as soon as received, have sent to him by express a fine copy of Webster's Unabridged Pictorial Dictionary, worth $6 00. For 16 subscribers, with $30, a copy of the same work abridged, worth $3 50. This offer is made for the fourth volume; but should either or all of the earlier volumes be included, each volume in numbers would count as a subscriber, all to go to one address. Money not to be over 1 per ct. discount.

HOW TO REMIT.—☞ *Register your money letters.* ☜ Don't listen to the persuasions of post-masters and neglect to register your letters—if you do, and the same is lost, don't blame us for refusing to furnish the Magazine. We will take the responsibility in all cases where letters are registered, and your receipt for it will be as good for you as though we got the money. We have no fears in such cases, for we have never yet known a registered letter to be lost. We have known our friends to neglect to do so, and the money never came to hand. *Set down all such post-masters as advise against registering as rogues!* The P. O. Department does not countenance such advice, and a post-master has no business to give it—should he do so, it is for some sinister motive. Southern and Illinois bills are at present 10 per cent. discount, and when such are sent, we shall expect the deficiency added to a remittance in stamps. When gold is sent, be careful to secure it against loss, by pasting it between two cards; a draft on New York, to our order, would be preferable to sending either bills or specie, where one can be had, and perfectly safe. Lastly, don't forget to prepay the postage, and direct your letter, in a plain hand, to E. M. STRATTON, No. 106 Elizabeth Street, New York City.

RENEW YOUR SUBSCRIPTIONS.—How many of our friends in past years have written us, "Why has my Magazine been stopped?"—and we have answered, Because we have received no instructions to continue it, *with the money in advance*. Let us take this opportunity to *hint*, that to you, reader, this is the closing number of your term of subscription, and that to receive it longer requires that you renew by sending us $3 00 without delay.

EDITORIAL CHIPS AND SHAVINGS.

LONDON STREET VEHICLES.—J. B. Gough, the great temperance lecturer, himself an Englishman, recently delivered a lecture on "The Streets of London," before a New York audience. In describing a scene in Hyde Park, he said that suddenly, as by the word of command, all stop; a couple of grooms pass, and immediately behind, in a carriage, sits a matronly lady, rather stout and in good color, with her daughter or a servant. There is nothing very extraordinary about her, but as that carriage passes every head is bared, and toward that carriage every eye is turned; and an Englishman, proud of his country, is still more so of her Queen. In London there are about 1,000 omnibuses, and the tax of a penny a mile to each amounts to $7,000 per week. There are 4,700 cabs, and the fares taken in public vehicles amount to $10,000,000 annually.

A FRENCH WHEELWRIGHT'S INVENTION.—The London *Mechanic's Magazine* says that a poor wheelwright in France has invented a railway which consists of a series of rails fitting one into the other like a succession of ladders laid flat upon the ground; over these the carts roll quietly along, let them be ever so heavily laden. One great advantage of the system is, the facility with which the rails are laid down and taken up. In one hour a hundred metres may be planted. The tedious carting of crops through wet and muddy fields is hereby avoided. The experimental rail was seventy-five centimeters in width. The carts filled with produce, whether pushed or drawn by a single person, were of one cubic metre, and moved with the greatest ease.

RIDING IN RED WAGONS DANGEROUS.—While traveling in Arkansas lately, in a red-painted wagon, Col. Claiborne found himself attacked by a herd of wild buffaloes. The phalanx blocked his road, and as he turned to flee they rushed wildly on after him as he urged onward the terror-stricken horse. The Colonel threw out successively his overcoat and a cushion, which the animals paused to trample upon, but they soon gained upon him, and their horns were already clashing against the back of the buggy, when he plunged his horse's breast deep into the hollow of a large oak, and there he was safe, the back of the buggy being the only point of attack. Discharges from a six-shooter, two bottles of brandy, a cold turkey, and finally a bottle of Scotch snuff, at last sent them off sneezing and bellowing.

EFFECTS OF FAST DRIVING IN PARIS.—From a statistical return lately published in Paris, it appears that 700 people are killed, and 5,000 more are wounded, annually, by carriages and other vehicles it that city. This is stated to be a greater number killed and wounded by carriages than on all the European railways during the same period.

CHANGES IN THE PATENT LAWS.—Congress, during its last session, abolished the discrimination in fees required of foreigners, except in cases where discriminating laws exist against citizens of the United States, except Canadians. Patents never to be renewed, in certain cases, are now granted for 17 instead of 14 years as under the old law.

TAXES ON CARRIAGES IN THE "SOUTHERN CONFEDERACY."—Among other things, the Common Council of Charleston propose to tax every four-wheeled coach for two horses, $30, and other vehicles $15 and $20 each, in addition to the State tax mentioned on page 199 of this volume.

The Coach-Maker's Letter-Box.

LETTER FROM INDIANA.

PRAIRIETON, Ind., February 25th, 1861.

MR. E. M. STRATTON:—*Dear Sir*, In pursuance of the letter of interrogation I transmitted to your address some weeks ago, and the propositions you sent in return, I now assume the task of jotting a few lines to your excellent and worthy Magazine. But when I take up my humble pen for the purpose of writing an article that, through the medium of your Magazine, will be placed upon the "bench," and in the hands, of almost every member of the "craft," perhaps to be criticised and rejected, I feel utterly incompetent to do justice to the undertaking, or to meet the expectation of your intelligent readers.

Before I proceed further, permit me to say a word eulogistically of THE NEW YORK COACH-MAKER'S MAGAZINE. I have had the invaluable privilege of perusing its contents, and have found it freighted with valuable mechanical information, and rich in mines of literary lore. As I turned the enchanted pages and read, I became perfectly enraptured with its practical hints, and thrilling adventures. I admire the "Siftings." But, excuse me.

This Magazine is intended to be the medium through which to convey and exchange ideas, in connection with the art of carriage-building, and to spread such information as may have a tendency to advance, improve, and develop that extensive and important branch of manufacture. The American people have long since felt the pressing necessity for improvement in the system of carriage-making, and some few energetic and practical men in the business, have continued to battle with "fogyism" and its cohorts, unceasingly endeavoring to effect a reformation in defiance of the courtly tread of opposition.

Some may imagine there should be no opposition to progress; but permit me to undeceive such. There is an element that exists, seemingly, to oppose invention, and the deeper the spirit of improvement, the fiercer the tempest of opposition. For illustration: When Robert Fulton had exhausted his means in testing the practicability of steam, he wrote to Governor Morehouse, of Virginia, for assistance, and said, "I look to the event, not many years hence, when the Atlantic will be crossed by steam." The Governor's incredulity was aroused, and he rejoined to the assertion in the cold, significant sentence, "Bob,

you're a fool." He did not believe, consequently he opposed the enterprise, and withheld his assistance. The improvement so much needed, and so much called for, has of late years been made to a great extent, and is steadily advancing, and the latent tastes that had long lain dormant have been delightfully and satisfactorily drawn out. But I am digressing.

With the forbearance of the reader, whom I sincerely entreat to be charitable, and the permission of the Editor, I will endeavor to advance a few remarks in regard to the "shop," and what I deem a proper mode of conducting the same. To conduct a business to lucrative and satisfactory results, or, in other words, to make it "pay," it is highly necessary that it should be prosecuted with all possible dispatch and firmness, thus securing the patronage of the country and gaining the confidence of the community surrounding. Before this can be accomplished it is indispensably necessary that the shop, in all its complicated branches, be placed in proper order—things set to rights generally. In the first place, due consideration should be employed in regard to the construction of the building in which it is intended to prosecute the business of carriage-making; for it is an indisputable fact that no business, of whatever character, can be successfully carried forward in a place not conveniently adapted to, and arranged for, its peculiar operations. In building a shop, the first thing to be considered in the specification is size, capacity, &c. Without ample provision in this respect, it will fail to "fill the bill;" it will never be convenient, and the dispatch of business will prove to be an impossibility. It is certainly true that a great advantage can be acquired by using due amount of precaution in regard to this matter; yet how many shops there are, especially in country towns, that have apparently been erected without so much as a single thought in reference to size or form!

As I write, I am reminded of an incident that came under my personal observation, not long since. I had stopped at a certain place over night, at the only hotel, and, of course, the best in the village. After discussing the breakfast which had been abundantly provided by the accommodating hostess, I inquired of the corpulent landlord, whose eye yet twinkled over the coin that had just exchanged purses in the way of remuneration for hospitalities, if there was a carriage-shop in the place. To which he answered in the affirmative, and went on at great length, with considerable gusto, to magnify the manner in which it was conducted, and the energy its enterprising proprietor had manifested in establishing a lucrative and satisfactory business. This he did apparently as much to establish a good opinion of the place, whose only tavern he was the landlord of, as to extol the shop and its proprietor; but, to use his own language, "it was undoubtedly a paying institution." After ascertaining the direction of the shop, thanking the old gentleman, and receiving his wishes for my success, I set out in search of the designated locality.

Turning the corner, I observed a hieroglyphicized sign poised over the sidewalk, which indicated the place I desired to find. Presenting myself at the door, I began to test its power of detention in rather a formidable manner, when I was politely informed, by some one on the inside, that I could get in by going to the back door, which I did, very submissively, and soon found myself within the desired establishment. After taking rather an impertinent survey of the assembled group, which was composed of about a dozen men, apparently of all professions, I selected the man that came nearest my idea of a "boss," and approaching him without preliminary ceremony, I inquired, "Are you the proprietor of this establishment?" To which he answered in the negative, but pointed significantly through the crowd, to the man of all others I would not have thought of being a boss, and said, "There's the boss." Upon which he came forward, when the following conversation ensued: "How's trade here?" "Excellent—more work than I can do." "Want a hand?" "Well, no, guess not—got no room." Whereupon he proceeded to inform me in relation to the matter. "This end of the shop," said he, "the work is performed in; *that* end is reserved for storage; consequently, there is no room for another hand." I took my leave, and soon found myself gliding over the iron rail, with the speed that grows faster and faster; and sincerely hoping that *that* carriage-maker might soon see the necessity of enlarging his shop. More anon. J. Walter Shirley.

INVENTIONS APPERTAINING TO COACH-MAKING, AT HOME AND ABROAD.

[Reported expressly for the New York Coach-maker's Magazine.]

AMERICAN PATENTED INVENTIONS.

*** To Inventors.—Persons who have made improvements in, or hold the right to dispose of, inventions relating to carriages, will find this Magazine the best medium through which to advertise their patents. It is taken by, and has a very large circulation among, coach-makers in every State of this Union, Canada, and a respectable circulation in England. The terms, which are very liberal, will be made known by letter, to correspondents, when directed to the Editor.

February 5. Improvement in the Joints of the Felloes in Carriage-Wheels.—F. M. Gibson, of Chelsea, Mass.: I claim the improved felloe-joint supporter, as constructed, with the tongue or projection, *b*, arranged with respect to the socket-piece *D*, substantially as specified.

I also claim the above specified arrangement and application of the felloe, D, its tongue, *b*, a spoke, C', the felloe, A, its joint, *e*, and the tire, B, the whole being to operate in manner and for the objects as specified.

An Improved Collar for Ornamental Carriage-work.—Moses Seward, of New Haven, Conn.: I claim, as an article of manufacture, an upset planished collar for ornamental carriage-work, formed without welding or turning.

Improvement in Apparatuses for the Manufacture of Varnishes (Patented in England, Jan. 27, 1860).—Frederick Walton, of Haughton Dale, Denton, near Manchester, Eng.: I claim the machine substantially as represented in Figs. 1, 2, and 3, and as above described.

Feb. 12. Improvement in Anvils.—C. H. Schadt, of New York city: I claim the arrangement of the stout spring, G, rising and falling plate, E, and weak-spring, H, in combination with the case, C, and anvil, A, constructed and operating substantially as and for the purpose described.

Improvement in Upsetting Tire.—C. M. Wilkins, of West Andover, Ohio: I claim the combination of the wedges, DD, with an anvil, in the manner described.

Feb. 19. Imbroved Felloe-Machine.—C. H. Denison, of Brattleboro, Vt.: I claim, first, the adjustment-plates, *n p*, provided with the pins *o g*, when used in connection with the plate G, and cutter-head, F, as and for the purpose set forth.

Second, The combination of the adjustable semicircular bed, or bearing-piece, I, and yielding-bar, J, with the cutter-head, F, plate, G, and bars, *n p*, provided with the pins, *o g*, all being arranged for joint operation, as and for the purpose set forth.

Improvement in the Mode of Uniting the Spokes and Felloes of Wooden Wheels.—D. A. Johnson, of Chelsea, Mass.:

I claim as new in coupling spokes with the parts of felloes of wooden wheels, by means of a metallic band, in the manner described, at each or any of the spokes, and conical pin or wedge for expanding the end of the spoke, constructing said band with an hour-glass-shaped cavity for reception of the spoke, and making the band to cover or overlap the outer end of the spoke, substantially as shown and described.

Improved Machine for Upsetting Tire.—W. G. Salmon and G. F. Bliss, of Placerville, Cal.: We claim the combination of the stationary and movable bed-plates A and B, their clamping-dogs, E and F, and jaws, D and D', as set forth, with the spring, G, sector, H, and cam, J, with its lever, J', all arranged and operating in the manner and for the purposes set forth.

Improvement in Apparatuses for Ascertaining the Fares taken on Public Conveyances.—D. F. Haasz (assignor to himself and Thomas Nash), of Philadelphia, Pa.: I claim a box, A, its two compartments, C and D, the zig-zag passage, *a*, valve, *e*, shield, *f*, and the sliding-door, B, or its equivalent, the whole being arranged as for the purpose set forth.

Improvement in Metallic Springs.—G. W. McMinn, of Covington, assignor to himself and R. T. Riley, of Cincinnati, O.: I claim, first, Forming the leaves of a metallic spring with alternate bosses, B, and depressions, C, adapted to rest one within another, in the manner and for the purpose set forth.

Second, in the described combination with the above, I claim the clamp, D E, adapted to confine or release the parts of the spring, in the manner set forth.

Feb. 26. Improved Arrangement of Carriage-Springs.—E. Roughton, of Frostburgh, Md.: I claim, first, The employment of bars, *d d*, the rods, *a a*, and the band E, arranged in the manner represented, for the purpose of holding the body of the vehicle in position, and for shielding and protecting the springs from strain, substantially as set forth.

Second, The combination of the springs, H H, with the bars, *d d*, rods, *a a*, band, E, and plates *e e'*; the several parts being used as and for the purpose specified.

RECENT EUROPEAN PATENTED INVENTIONS.

Nov. 7. Bewicke Blackburn, York Buildings, Adelphia, and Henry Carr, Victoria street, London—Improvements in axle-boxes.

27. Charles Myring, Wallsall, Staffordshire—Improvements in the manufacture of covered harness furniture, buckles, slides, and other similar articles, and in the machinery or apparatus to be employed in such manufacture.

22. William F. Lovick, Thorpe, near Norwich, Norfolk—An improved bridle-bit, which he terms a check-snaffle bit, for restraining vicious or hard-mouthed horses with greater facility than with any other bit.

29. Robert Offord, Jun., Wells street, Oxford street, London—Improvements in the adaptation of India-rubber, and compounds thereof to wheels.

30. George Parsons, Martock, Somerset—Improvements in the construction of wheels.

Dec. 1. William L. Tizzard, Mark Lane, London—Improvements in fastening threaded nuts and bolts.

10. Thomas Peake, Derby—An improved method of locking or "skidding" the wheels of vehicles, for the purpose of retarding or arresting the progress thereof.

14. James Fenton, Queen street, Lincoln's Inn, London—An improved method of securing the wearing tires on wheels.

17. Nicholas C. Szerelmey, Park Terrace, Brixton Road, Surrey—An improved method of, and apparatus for, purifying oils and varnishes.

22. Henry Hughes, Loughborough, Leicester—An improved method of making wheels for carts, wagons, and carriages, for common roads and railways.

27. Richard A. Brooman, Fleet street, London—Improvements in axle-boxes and in naves [hubs] of wheels.

PROSPECTUS OF THE FOURTH VOLUME.

THE BEST OF ITS KIND IN EXISTENCE, AND THE ONLY ONE IN AMERICA!

On the 11th of MAY next will be Issued

No. 1, Volume IV., for June,

OF

THE NEW YORK

COACH-MAKER'S

Monthly Magazine,

DEVOTED TO THE LITERARY, SOCIAL, AND MECHANICAL INTERESTS OF THE CRAFT.

Each number will, as heretofore, contain four Tinted Plates of approved working Designs (mostly original) for Carriages; Scroll, and other Ornamental Figures, for the Painter; Stitching, &c., for the Trimmer, and Designs for the Smith-work; together with 20 pages of Illustrated Letter-press matter, several pages of Advertisements of Carriage Materials, and a Cover; the whole calculated to benefit the Carriage-builder in his interesting but difficult Art, and form the most valuable Companion for his Workshop ever offered to any body of artistic Workmen.

Three years have now passed since this work was first established, and though our country has been afflicted with pecuniary embarrassments during that period, which have sorely tried the coach-making fraternity, we have, so far, found friends to our enterprise, who, by their voluntary assistance in making up clubs, &c., have made it, up to the present moment, a paying one. We have likewise been favored by many able contributions to our columns, from the craft, without which our own labors would have failed in making the work as interesting, as we are proud to believe it has been rendered, to our patrons. To all these, we owe a debt of thankfulness which we despair of ever being able to discharge.

The Editor enters upon the preparation of his fourth volume, believing that, with the help of his many warm friends, who have given him encouragement that they "will stick by him," he will be able to meet the reasonable expectations of the craft, and furnish them with more practical matter than any other similar work has ever done, or can do. Promising to do our best to merit the continued confidence and approval of the craft, it only remains for us to ask that every friend to this Magazine will early renew his own individual subscription expiring with this volume, and endeavor to get all within his circle of influence to give us their patronage to the fourth year's publication. See the terms on the first page of the cover to this number, and secure the premium by a little exertion among your shopmates. Register your money letters and send in at the earliest period, that we may regulate our edition accordingly.

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